TCEQ Interoffice Memorandum

TO: Office of the Chief Clerk
Texas Commission on Environmental Quality

THRU: Chris Kozlowski, Team Leader
Water Rights Permitting Team

FROM: Sarah Henderson, Project Manager
Water Rights Permitting Team

DATE: July 31, 2020

SUBJECT: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042, Requiring Limited Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

The application and partial fees were received on January 27, 2020. Additional information and fees were received on May 14 and June 25, 2020. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on July 31, 2020. Limited mailed notice to the interjacent water right holders of record within the Sabine River Basin is required pursuant to Title 30 Texas Administrative Code (TAC) §§ 295.158(c)(3)(D) and 295.161(b).

All fees have been paid and the application is sufficient for filing.

Sarah E Henderson
_____
Sarah Henderson, Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section

OCC Mailed Notice Required ☐YES ☑NO

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 31, 2020

Mr. Gary Burton **VIA E-MAIL**
Capco Engineering, Inc.
13044 CR 192
Tyler, TX 75703

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042, Requiring Limited Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

Dear Mr. Burton:

This acknowledges receipt, on May 14 and June 25, 2020, of additional information and fees in the amount of $163.56 (Receipt No. M019892, copy attached).

The application was declared administratively complete and filed with the Office of the Chief Clerk on July 31, 2020. Staff will continue processing the application for consideration by the Executive Director.

Please be advised that additional information may be requested during the technical review phase of the application process.

If you have any questions concerning this matter please contact me via email at sarah.henderson@tceq.texas.gov or by telephone at (512) 239-2535.

Sincerely,

Sarah E Henderson

Sarah Henderson, Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section

Attachment

Basis2 Receipt Report by Endorsement Number

JUN-22-20 08:34 AM

Acct. #: PTGU **Account Name:** NOTICE FEES WUP WATER USE PERMITS

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
	M019892	ADJ054675B	CANTON, CITY OF	CK	743548		BS00080734	28-MAY-20	$163.56

Sarah Henderson

From: Gary Burton [redacted]
Sent: Thursday, June 25, 2020 3:37 PM
To: Sarah Henderson
Cc: Kathy Alexander; Emily Rogers; Leonard Zapolsky; Lonny Cluck
Subject: City of Canton App No. 05-4675B
Attachments: Clarification Ltr w p2.pdf

Sarah:

Attached please find my letter of clarification and Worksheet 3.0 page 2, as recommended by Emily after her conversation with Kathy this week.

Gary L. Burton, III, PE
Capco Engineering, Inc.
13044 CR 192
Tyler, TX 75703
O: 903-531-9671
C: 903-571-1273

CAPCO ENGINEERING INC.

June 25, 2020

Ms. Sarah Henderson, Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
Sarah.Henderson@tceq.texas.gov

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042
Mill Creek, Sabine River Basin
Van Zandt County

Dear Ms. Henderson:

The purpose of the this letter is to clarify the City of Canton's (City) request to amend Certificate of Adjudication No. 05-4675 and to provide you and the Texas Commission on Environmental Quality's (TCEQ) staff with additional information to aid in the review of the application and preparation of the draft permit. Please consider the following:

1. The City is not requesting any changes to the diversion reach authorized by Certificate of Adjudication No. 05-4675A.

2. The City no longer requests that the streamflow restrictions for the diversions of groundwater-based return flows be removed.

3. The response to Administrative Report 3.d. is "yes."

4. There is zero percent water loss because the City will not be storing the return flows in accordance with the City's accounting plan.

5. The City has attached the second page of Worksheet 3.

If you have any questions or concerns, please contact me [redacted] or at (903) 531-9671.

Sarah.Henderson @ tceq.texas.gov
June 25, 2020

Sincerely,

Gary L. Burton, III, P.E.
Project Engineer

cc: Emily Rogers
Lonny Cluck [redacted]

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Mill Creek (SCS Site No.1 Reservoir)

b. Zip Code: 75103

c. Location of point: In the J. Douthit Original Survey No. 467195, Abstract No. A-198, Van Zandt County, Texas.

A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure. For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to: a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.

d. Point is at:
Latitude 32.538956 °N, Longitude 95.853939 °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

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

f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.

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

Sarah Henderson

From: Gary Burton <[redacted]
Sent: Thursday, May 14, 2020 12:14 PM
To: Sarah Henderson
Cc: Leonard Zapolsky; Emily Rogers; Lonny Cluck
Subject: FW: Email 1: RE: City of Canton 05-4675B - Water Use Amendment Application
Attachments: Application corrections - Response on letter from 042920.pdf; Exhbt 7 WWTP Discharge Data 2015-19.xlsx; TCEQ_RFI-04292020.pdf

Sarah:

Attached are a revised application, wastewater discharge data in electronic format, and your RFI letter dated April 29, 2020. We believe we have satisfactorily addressed all of your comments. A second email follows this one.

From: Leonard Zapolsky <[redacted]
Sent: Thursday, May 14, 2020 11:21 AM
To: Gary Burton <[redacted]
Subject: Email 1: RE: City of Canton 05-4675B - Water Use Amendment Application

Mr. Gary,

In an attachment you will find the Application pages scans and spreadsheet with water use data (Exhibit 7).

Regards,
Leonard Zapolskyy
Engineering Intern
Capco Engineering Inc.
13044 CR 192
Tyler, TX 75703
Phone: (903)531-9671

From: Gary Burton <[redacted]
Sent: Friday, May 08, 2020 3:02 PM
To: Sarah Henderson <sarah.henderson@tceq.texas.gov>
Cc: Emily Rogers <[redacted]; Leonard Zapolsky <[redacted]>
Subject: RE: City of Canton 05-4675B - Water Use Amendment Application

Sarah:

Would you please elaborate as to what you are requesting on comment #13?

From: Sarah Henderson <sarah.henderson@tceq.texas.gov>
Sent: Wednesday, May 6, 2020 4:45 PM
To: Gary Burton <[redacted]
Subject: RE: City of Canton 05-4675B - Water Use Amendment Application

Mr. Burton,

Please find the attached response to your extension request. A response is now due July 29th.
Feel free to contact me directly with any questions.
Sincerely,
Sarah

Sarah Henderson
Water Rights Permitting Team
Water Availability Division
Texas Commission on Environmental Quality
P.O. Box 13087/MC-160
Austin, TX 78711-3087
(P) 512.239.2535
(F) 512.239.4770

From: Gary Burton <[redacted]
Sent: Friday, May 1, 2020 3:04 PM
To: Sarah Henderson <Sarah.Henderson@tceq.texas.gov>
Cc: Lonny Cluck <[redacted]>; Emily Rogers <[redacted]
Subject: RE: City of Canton 05-4675B - Water Use Amendment Application

Sarah:

Please see attached letter. We are asking for 60 more days.

From: Sarah Henderson <sarah.henderson@tceq.texas.gov>
Sent: Thursday, April 30, 2020 11:09 AM
To: Gary Burton <[redacted]
Subject: RE: City of Canton 05-4675B - Water Use Amendment Application

Mr. Burton,
Yes, you can request an extension for 30 additional days. If you would please send me an official request on your letterhead I will forward to my management for approval.
Sincerely,
Sarah

From: Gary Burton <[redacted]
Sent: Thursday, April 30, 2020 10:48 AM
To: Sarah Henderson <sarah.henderson@tceq.texas.gov>
Cc: Lonny Cluck <[redacted]; Emily Rogers <[redacted]
Subject: RE: City of Canton 05-4675B - Water Use Amendment Application

Ms. Henderson:

The City of Canton has had to suspend its monthly First Monday Trade Days due to the Covid 19 pandemic. The event is a huge source of revenue for the city. As a result, I have been asked to suspend work on this project temporarily. Due to these unusual circumstances, is there any way to get an extension to the May 29 deadline? Thank you for your consideration.

From: Sarah Henderson <sarah.henderson@tceq.texas.gov>
Sent: Thursday, April 30, 2020 9:25 AM
To: Gary Burton <[redacted]
Subject: City of Canton 05-4675B - Water Use Amendment Application

Mr. Burton,
Please find the attached request for information letter regarding the referenced application. A response is requested by May 29th.
Feel free to contact me with any questions.
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(P) 512.239.2535
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Sarah Henderson

From: Gary Burton <[redacted]
Sent: Thursday, May 14, 2020 12:16 PM
To: Sarah Henderson
Cc: Leonard Zapolsky; Emily Rogers; Lonny Cluck
Subject: FW: Email 2: RE: City of Canton 05-4675B - Water Use Amendment Application
Attachments: Exhbt 2 Project Overview 22x34 051120.pdf; Exhbt 3 PROJ DETAILS 11x17 051120.pdf; Exhbt 4A Loc and Dir of Photos 051120.pdf

Sarah:

Attached are 3 revised maps.

The additional $163.56 fee will be sent from the City of Canton via USPS.

From: Leonard Zapolsky <[redacted]
Sent: Thursday, May 14, 2020 11:22 AM
To: Gary Burton <[redacted]>
Subject: Email 2: RE: City of Canton 05-4675B - Water Use Amendment Application

In an attachment are 3 maps as PDF-files.

Regards,
Leonard Zapolskyy
Engineering Intern
Capco Engineering Inc.
13044 CR 192
Tyler, TX 75703
Phone: (903)531-9671

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Water Availability Division
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P.O. Box 13087/MC-160
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ WATER RIGHTS PERMITTING APPLICATION

ADMINISTRATIVE INFORMATION CHECKLIST

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

APPLICANT(S): City of Canton

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

Y/N		Y/N	
Y	**Administrative Information Report**	Y	**Worksheet 3.0**
N	Additional Co-Applicant Information	N	Additional W.S 3.0 for each Point
N	Additional Co-Applicant Signature Pages	Y	Recorded Deeds for Diversion Points
Y	Written Evidence of Signature Authority	N	Consent For Diversion Access
Y	**Technical Information Report**	Y	**Worksheet 4.0**
Y	USGS Map (or equivalent)	Y	TPDES Permit(s)
Y	Map Showing Project Details	Y	WWTP Discharge Data
Y	Original Photographs	N	24-hour Pump Test
N	Water Availability Analysis	N	Groundwater Well Permit
Y	**Worksheet 1.0**	N	Signed Water Supply Contract
N	Recorded Deeds for Irrigated Land	Y	**Worksheet 4.1**
N	Consent For Irrigation Land	Y	**Worksheet 5.0**
N	**Worksheet 1.1**	N	Addendum to Worksheet 5.0
N	Addendum to Worksheet 1.1	Y	**Worksheet 6.0**
Y	**Worksheet 1.2**	N	Water Conservation Plan(s)
Y	Addendum to Worksheet 1.2	N	Drought Contingency Plan(s)
Y	**Worksheet 2.0**	N	Documentation of Adoption
N	Additional W.S 2.0 for Each Reservoir	Y	**Worksheet 7.0**
N	Dam Safety Documents	Y	Accounting Plan
N	Notice(s) to Governing Bodies	Y	**Worksheet 8.0**
N	Recorded Deeds for Inundated Land	Y	Fees
N	Consent For Inundation Land		

For Commission Use Only:
Proposed/Current Water Right Number: _____
Basin: _____ Watermaster area Y/N: _____

ADMINISTRATIVE INFORMATION REPORT

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

****Applicants are strongly encouraged to schedule a pre-application meeting with TCEQ Staff to discuss Applicant's needs prior to submitting an application. Call the Water Rights Permitting Team to schedule a meeting at* (512) 239-4691.

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

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

_____New Appropriation of State Water

X Amendment to a Water Right *

X Bed and Banks

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

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

1) Amend CoA No. 05-4675A to add a new discharge point for groundwater and surface water based return flows on the unnamed tributary of Mill Creek Reservoir. 2) Add a second diversion point from the perimeter of Mill Creek Reservoir, which is at the City's existing diversion point under CoA No. 05-4675. 3) Authorize the use of the bed and banks of the unnamed tributary of Mill Creek Reservoir and Mill Creek Reservoir to convey up to 865 acre-feet per year of return flows from the discharge point No.002 (TPDES Permit WQ0010399002) to the second diversion point location. 4) Remove the stream flow restrictions for diversions of groundwater-based return flows.

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

This section should be completed if Applicant owns an existing water right and Applicant requests to amend the water right. ***If Applicant is not currently the Owner of Record in the TCEQ Records, Applicant must submit a Change of Ownership Application (TCEQ-10204) prior to submitting the amendment Application or provide consent from the current owner to make the requested amendment.*** **See instructions page. 6.**

Water Right (Certificate or Permit) number you are requesting to amend: 05-4675A

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

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

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

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

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

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

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

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

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

If yes, submit: **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for each diversion point or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach)

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

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

f. Other - Applicant requests to change any provision of an authorization not mentioned above?**Y / N** N *If yes, call the Water Availability Division at (512) 239-4691 to discuss.*

Additionally, all amendments require:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Worksheets and information:

- **Worksheet 1.0 – Quantity, Purpose, and Place of Use Information Worksheet**
- **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir owned by the applicant through which water will be conveyed or diverted)
- **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for the downstream limit of each diversion reach for the proposed conveyances)
- **Worksheet 4.0 – Discharge Information Worksheet** (for each discharge point)
- **Worksheet 5.0 – Environmental Information Worksheet**
- **Worksheet 6.0 – Water Conservation Information Worksheet**
- **Worksheet 7.0 – Accounting Plan Information Worksheet**
- **Worksheet 8.0 – Calculation of Fees; and Fees calculated – see instructions Page. 34**
- **Maps** – See instructions **Page. 15.**
- **Additional Documents and Worksheets may be required (see within).**

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

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

Quantity (acre-feet)	Existing Purpose(s) of Use	Proposed Purpose(s) of Use*	Existing Place(s) of Use	Proposed Place(s) of Use**

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

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

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

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

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

ii) Location of land to be irrigated: In the _____Original Survey No. _____, Abstract No._____.

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

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

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

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

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

WORKSHEET 1.2
"THE MARSHALL CRITERIA"

a) Administrative Requirements and Fees

This application provides relevant information to address the administrative requirements of 30 TAC § 295, Subchapter A and the requirements of Texas Water Code Chapter 11. In accordance with 30 TAC § 295.131 and other TCEQ rules relating to fees, the City is submitting payment of $112.50 with this application. With filing this application, the City requests a determination of any additional fees that may be required. Upon receipt of such determination, the City will forward such fees to the TCEQ.

b) Beneficial Use

Texas Water Code §11.134(b)(3)(A) requires that proposed appropriations of water be intended for a beneficial use. The "beneficial use" of water is defined in Texas Water Code §11.002(4) and 30 TAC §297.1(8) as the use of water "which is economically necessary for a purpose authorized by [Chapter 11 of the Texas Water Code]." An "industrial" purpose of use is identified in Texas Water Code §11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC §297.1(24) to include "the use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value." A "municipal" purpose of use is identified in Texas Water Code § 11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC §297.1(32) to include "the use of potable water within a community or municipality and its environs for domestic, recreation, commercial, or industrial purposes or for the water of golf courses, parks and parkways, or the use of reclaimed water in lieu of potable water for the preceding purposes." Certificate of Adjudication 05-4675A is authorized for municipal and industrial uses, and the proposed amendment does not change those uses.

c) Public Welfare

The proposed amendment will allow the City to transfer its already authorized 865 ac-ft/year of return flows to its existing surface water supply reservoir. Such action is not detrimental to the public welfare. Indeed, the proposed amendment will benefit the public welfare as it will allow the City to more efficiently utilize existing water supplies to address multiple demands for water.

d) Groundwater Assessment

In addition to the water the City receives from Mill Creek, the City obtains water from the Carrizo-Wilcox Aquifer. It has been the experience of the City of Canton and other Van Zandt County public water suppliers that wells in this area tend to decrease in production capacity over time. Reuse of its already authorized surface water and groundwater return flows should have the effect of reducing the amount of groundwater needed to meet its demands in the future, thereby helping other wells to maintain production capacities. Attached in Exhibit

9 is a Summary of Surface Water and Groundwater Use for 5 Years based upon the City's monthly water operating reports from 2014 to 2018.

e) Consistency with State and Regional Water Plans

The City is located within the Region D Planning Group as noted in the Region D Plan found in the Texas Water Development Board's *Water for Texas 2017.* Water reuse is recognized under the State Water Plan as a recommended strategy which will supply 14% of all water management strategies by 2070.[1] Furthermore, the Region D Water Plan indicates estimated available water supply for Mill Creek during drought of record is 1,145 ac-ft/year, a reduction of 355 ac-ft/year from its original permitted yield of 1,500. Consequently, additional water supply is needed to meet current demands. The Indirect Reuse of 865 ac-ft/year already approved by Certificate of Adjudication (COA) 05-4675A was shown as a water management strategy for Canton in the 2016 Region D Plan. Shortly after completion of that plan, the COA Amendment was approved by TCEQ. We are not seeking to deviate from the 2016 Region D Plan or the 2017 State Water Plan. We are simply seeking to amend where those return flows are discharged and diverted to the City's water system.

f) Water Conservation, Drought Contingency and Avoidance of Waste

As defined in both 30 TAC §295.9 and Texas Water Code §11.002(8), "conservation" means those practices that will "reduce the consumption of water, reduce the loss or waste of water, *improve the efficiency in the use of water,* or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses." [Emphasis added]. By amending the Certificate to allow for a second wastewater effluent discharge location upstream of the surface water reservoir, the City will have the flexibility to transfer the permitted return flows more efficiently with less energy and less record keeping. Such efficiency, along with the City's water conservation and drought contingency plan, will allow the City to address its water supply needs in a manner that will allow it to avoid waste and achieve water conservation.

g) Impacts on Other Water Rights Holders or the Environment

By this application, the City merely seeks to allow for a second wastewater treatment plant discharge location for use during drought conditions in order to fully reuse its already permitted return flows arising from its use of groundwater or its surface water rights as contained in the amended Certificate, and to reduce the length of its permitted bed & banks diversion reach. The City's proposed amendment to reuse its permitted return flows more efficiently will not have an impact on other water right holders or the environment. The City *is* currently authorized to divert and fully consume up to 1,550 acre-feet of surface water per annum, *and* to reuse 865 acre-feet of return flows of combined surface and ground water per annum. Unless provided otherwise in a water right, there is no restriction against full consumption of water authorized for diversion. While TCEQ has issued some water rights that require a certain percentage of return flows to the basin of origin, or an express limitation on consumption, the amended Certificate contains no such restriction. Pursuant to the "full use assumption" of Texas Water Code § 11.122(b), the City's use of its permitted 865 acre-feet

return flows or its 1,550 acre-feet of water rights will not cause an adverse impact on other water rights holders or the environment of greater magnitude than if the City fully exercised its rights as currently authorized.

Moreover, groundwater-based return flows are non-native to the state water in the Sabine River Basin, and therefore the City's diversion and use of these return flows should have no impact on other water rights holders or the environment.

[1] Texas Water Development Board, *Water for Texas 2017,* pg. 90, available at http://www.twdb.texas.gov/waterplanning/swp/2017/doc/SWP17-Water-for-Texas.pdf?d=19143.194999545813

[2] Region D Planning Group, *North East Texas Regional Water Plan, Volume 2, Appendix C, Chapter 3,* pg. *55 of 72* (2016), available at http://www.twdb.texas.gov/waterplanning/rwp/plans/2016/D/Region_D_2016_RWPV2.pdf?d=5384.109999984503

WORKSHEET 2.0

Impoundment/Dam Information

WORKSHEET 2.0
Impoundment/Dam Information

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

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

1. Storage Information (Instructions, Page. 21)

a. Official USGS name of reservoir, if applicable: N/A

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

c. The impoundment is on-channel_____ or off-channel_____ (mark one)

1. Applicant has verified on-channel or off-channel determination by contacting Surface Water Availability Team at (512) 239-4691? **Y / N**

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

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

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

1. Date of Construction:_____

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

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

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

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

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

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

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

1. Surface area (in acres) of on-channel reservoir at normal maximum operating level:_____.

2. Based on the Application information provided, Staff will calculate the drainage area above the on-channel dam or reservoir. If Applicant wishes to also calculate the drainage area they may do so at their option.
Applicant has calculated the drainage area. **Y/N**
If yes, the drainage area is_____ sq. miles.
(If assistance is needed, call the Surface Water Availability Team prior to submitting the application, (512) 239-4691).

2. Structure Location (Instructions, Page. 23)

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

b. Zip Code: _____

c. In the _____Original Survey No. _____, Abstract No._____, _____County, Texas.

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

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

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

Latitude _____°N, Longitude _____°W.

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

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

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

WORKSHEET 3.0

Diversion Point No. 2

WORKSHEET 3.0
DIVERSION POINT (OR DIVERSION REACH) INFORMATION

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

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

1. Diversion Information (Instructions, Page. 24)

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

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

b. Maximum Rate of Diversion for **this new point** 6.03 cfs (cubic feet per second) or 2,708 gpm (gallons per minute)

c. Does this point share a diversion rate with other points? **Y / N** Y
*If yes, submit Maximum **Combined** Rate of Diversion for all points/reaches* 6.03 cfs or 2,708 gpm

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

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

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

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

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

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

If yes, the drainage area is 9.7 sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4691, prior to submitting application*)

WORKSHEET 4.0
DISCHARGE INFORMATION

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

a. The purpose of use for the water being discharged will be Industrial and municipal.

b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 0 % and explain the method of calculation: See Exhibit 12

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

1. The TPDES Permit Number(s). WQ0010399-002 (attach a copy of the **current** TPDES permit(s))

2. Applicant is the owner/holder of each TPDES permit listed above? **Y / N** Y

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

3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").

4. The percentage of return flows from groundwater 30%, surface water 70%?

5. If any percentage is surface water, provide the base water right number(s) CoA #05-4675.

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

1. Source aquifer(s) from which water will be pumped:

2. Any 24 hour pump test for the well if one has been conducted. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp. Additionally, provide well numbers or identifiers.

3. Indicate how the groundwater will be conveyed to the stream or reservoir.

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

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

cii. Identify any other source of the water None

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

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

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 865 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.

b. Water will be discharged at this point at a maximum rate of 6.03 cfs or 2,708 gpm.

c. Name of Watercourse as shown on Official USGS maps: Soil Conservation Service Site No. 1 Reservoir

d. Zip Code: 75103

f. Location of point: In the J. Douthit Original Survey No. 467198, Abstract No. A-198, Van Zandt County, Texas.

g. Point is at:

Latitude 32.538717 °N, Longitude -95.847223 °W.

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

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

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

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

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

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

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

d. Waterbody Recreational Uses

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

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

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

☐ Non-contact recreation

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

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

2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).

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

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

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

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

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

For all bed and banks applications:

a. Indicate the measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).

See Exhibit 12

b. An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements. See Exhibit 12

If the alternate source is treated return flows, provide the TPDES permit number WQ0010399-002

If groundwater is the alternate source, or groundwater or other surface water will be discharged into a watercourse provide:

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

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

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

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

WORKSHEET 6.0

WORKSHEET 6.0
Water Conservation/Drought Contingency Plans N/A

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

The TCEQ has developed guidance and model plans to help applicants prepare plans. Applicants may use the model plan with pertinent information filled in. For assistance submitting a plan call the Resource Protection Team (Water Conservation staff) at 512-239-4691, or e-mail wras@tceq.texas.gov. The model plans can also be downloaded from the TCEQ webpage. ***Please use the most up-to-date plan documents available on the webpage.***

1. Water Conservation Plans

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Drought Contingency Plans

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

1. _____Municipal Uses by public water suppliers. See 30 TAC § 288.20.

2. _____Irrigation Use/ Irrigation water suppliers. See 30 TAC § 288.21.

3. _____Wholesale Water Suppliers. See 30 TAC § 288.22.

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

WORKSHEET 8.0
CALCULATION OF FEES

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

1. NEW APPROPRIATION

	Description	Amount ($)
Filing Fee	Circle fee correlating to the total amount of water* requested for any new appropriation and/or impoundment. Amount should match total on Worksheet 1, Section 1. Enter corresponding fee under **Amount ($).** <u>In Acre-Feet</u> a. Less than 100 $100.00 b. 100 - 5,000 $250.00 c. 5,001 - 10,000 $500.00 d. 10,001 - 250,000 $1,000.00 e. More than 250,000 $2,000.00	
Recording Fee		$25.00
Agriculture Use Fee	*Only for those with an Irrigation Use.* Multiply 50¢ x _____ Number of acres that will be irrigated with State Water. **	
Use Fee	*Required for all Use Types,* ***excluding Irrigation Use.*** Multiply $1.00 x _____ Maximum annual diversion of State Water in acre-feet. **	
Recreational Storage Fee	*Only for those with Recreational Storage.* Multiply $1.00 x _____ acre-feet of in-place Recreational Use State Water to be stored at normal max operating level.	
Storage Fee	*Only for those with Storage,* ***excluding Recreational Storage.*** Multiply 50¢ x _____ acre-feet of State Water to be stored at normal max operating level.	
Mailed Notice	Cost of mailed notice to all water rights in the basin. Contact Staff to determine the amount (512) 239-4691.	
	TOTAL	$

2. AMENDMENT *OR* SEVER AND COMBINE

	Description	Amount ($)
Filing Fee	Amendment: $100	$100
	OR Sever and Combine: $100 x ___of water rights to combine	Notice Fee - $163.56
Recording Fee		$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	$ 276.06

3. BED AND BANKS

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

LIST OF EXHIBITS

Number	Description
1	Amendment to a Certificate of Adjudication No. 05-4675A (Administrative Information Report)
2	7.5-minute USGS Quadrangle Map – Project Overview (Technical Information Report)
3	USGS Map – Project Details (Technical Information Report)
4	Original Photographs (Technical Information Report & Worksheet 5.0): - Map showing the location and direction of photographs; - Photographs of existing & proposed diversion points/reaches
5	Recorded Deeds for Diversion Points (Worksheet 3.0)
6	TPDES Permit WQ 0010399002 (Worksheet 4.0)
7	WWTP Discharge Data (Worksheet 4.0)
8	Water Conservation Plan (Worksheet 6.0)
9	Water Use Data for 2014 – 2018 (Worksheet 6.0)
10	Accounting Plan (Worksheet 7.0)
11	Fees (Worksheet 8.0)
12	Addendum (Worksheet 5.0)

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 1a –Lake shore (Intermittent stream mouth on the right) looking West

Photograph No. 1b – Lake shore zoomed in looking West

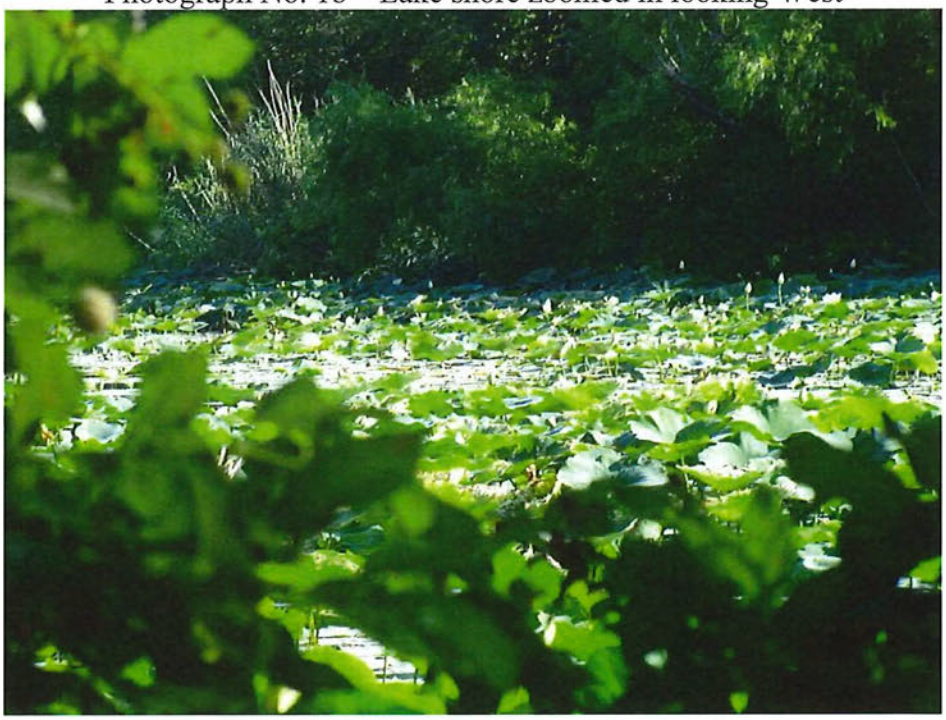


EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 2a – Intermittent stream 200 ft downstream from proposed Outfall of Canton WWTP Discharge Point #002 looking North

Photograph No. 2b – Intermittent stream looking West

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 3a – Proposed Outfall of Canton WWTP Discharge Point #002 looking South

Photograph No. 3b – 100 ft downstream of Intermittent stream from proposed Canton WWTP Discharge Point #002 Outfall looking South

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 4a – Lake shore (Intermittent Stream mouth on the left) looking East

Photograph No. 4b – Lake shore looking East (zoomed in)

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 5– Existing Structure of Diversion point No. 2 looking South East

Photograph No. 5a – Existing Structure of Diversion point No. 2 looking South East (Dec 2018)

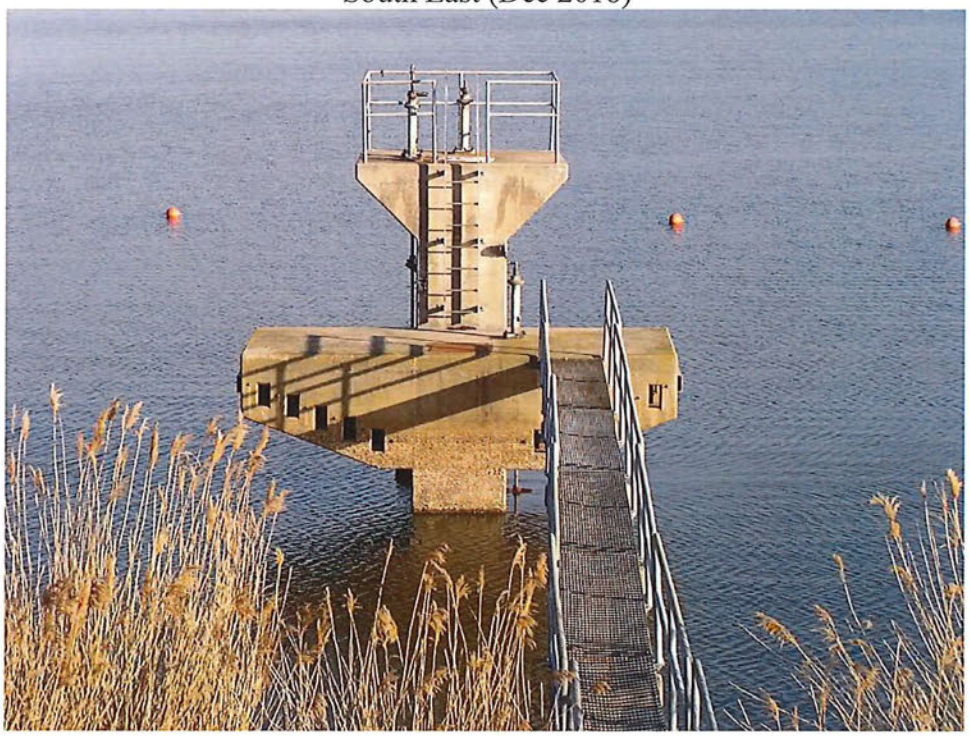
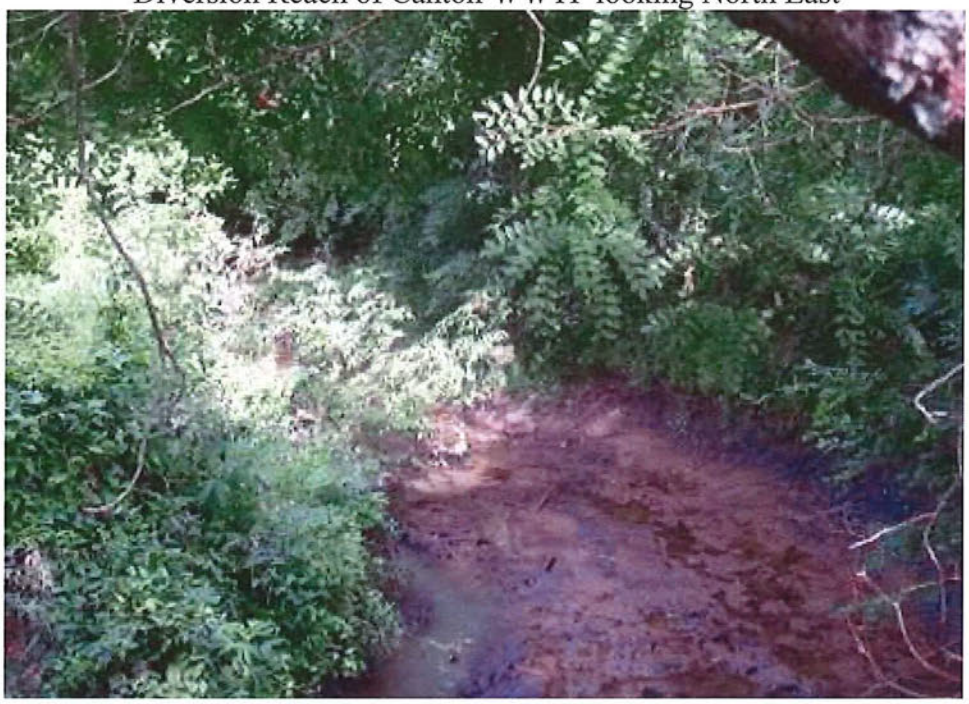


EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 6 –Outfall of existing DP #001 & Upstream Limit of Diversion Reach of Canton WWTP looking North East



Photograph No. 7 – Outfall of Canton WWTP Discharge Point #001 & Upstream Limit of Diversion Reach looking North West

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 8 – Outfall of Canton WWTP Discharge Point #001 & Upstream Limit of Diversion Reach looking South West

I. INTRODUCTION

The City of Canton (the "City") is authorized to store, divert and use surface water in Mill Creek Lake and to use the bed and banks of Mill Creek to divert return flows and discharge to an undisclosed location pursuant to Certificate of Adjudication ("CA") No. 05-4675A. The City also uses groundwater. The City is seeking to amend its indirect reuse permit in a way which will allow the City to:

- Divert and reuse existing and future City return flows within the City's service area
- Use the bed and banks of the unnamed tributary of Mill Creek Reservoir and Mill Creek Reservoir to convey up to 865 ac*ft/year of return flows from the discharge point #2 to the diversion point #2 location for reuse.
- Divert return flows subject to the following limitations:
  1. Diversions of return flows shall be limited to times when streamflow exceeds the following environmental flow values as measured at a monitoring device to be installed immediately downstream of the diversion point.

Season	Environmental (Bypass) Base Flow
Winter (January-March)	6 cfs
Spring (April-June)	3 cfs
Summer (July-September)	1 cfs
Fall (October-December)	1 cfs

  2. If the streamflow measured at the monitoring device is greater than the applicable base flow value, then the Owner may divert return flows up to the authorized amounts, as long as the flow at the device does not fall below the applicable base flow value.
  3. The streamflow at the monitoring device shall be noted and recorded between 9 AM and 10 AM on the day of an anticipated diversion and daily at the same time for the duration of all diversions. Gage flow readings in the stream shall be taken on the same day as the diversions to which they apply.
  4. In the event of a leap year, a blank row is present in each table pertaining to the month of February to accept an entry for February 29th.
- Transport existing and future City return flows through a pipeline and discharge to an alternate outfall 002 into an unnamed tributary of Mill Creek Lake

II. ELEMENTS OF THE ACCOUNTING PLAN

The Accounting Plan is in the form of an Excel workbook spreadsheet with five (5) tabs/worksheets. It includes the following elements:

Comments – includes comments as to who developed the plan, shaded vs. unshaded cell explanations, and revision dates.

Constants – includes Descriptions, Names, and Values of constants and conversion factors used throughout the plan that are also referenced in some of the table formulae. It also includes the table of instream environmental base flow requirements.

Exhibit 12

Addendum

(Worksheet 5.0, Item 2.a, 2.b)

EXHIBIT 12
ADDENDUM TO WORKSHEET 5.0

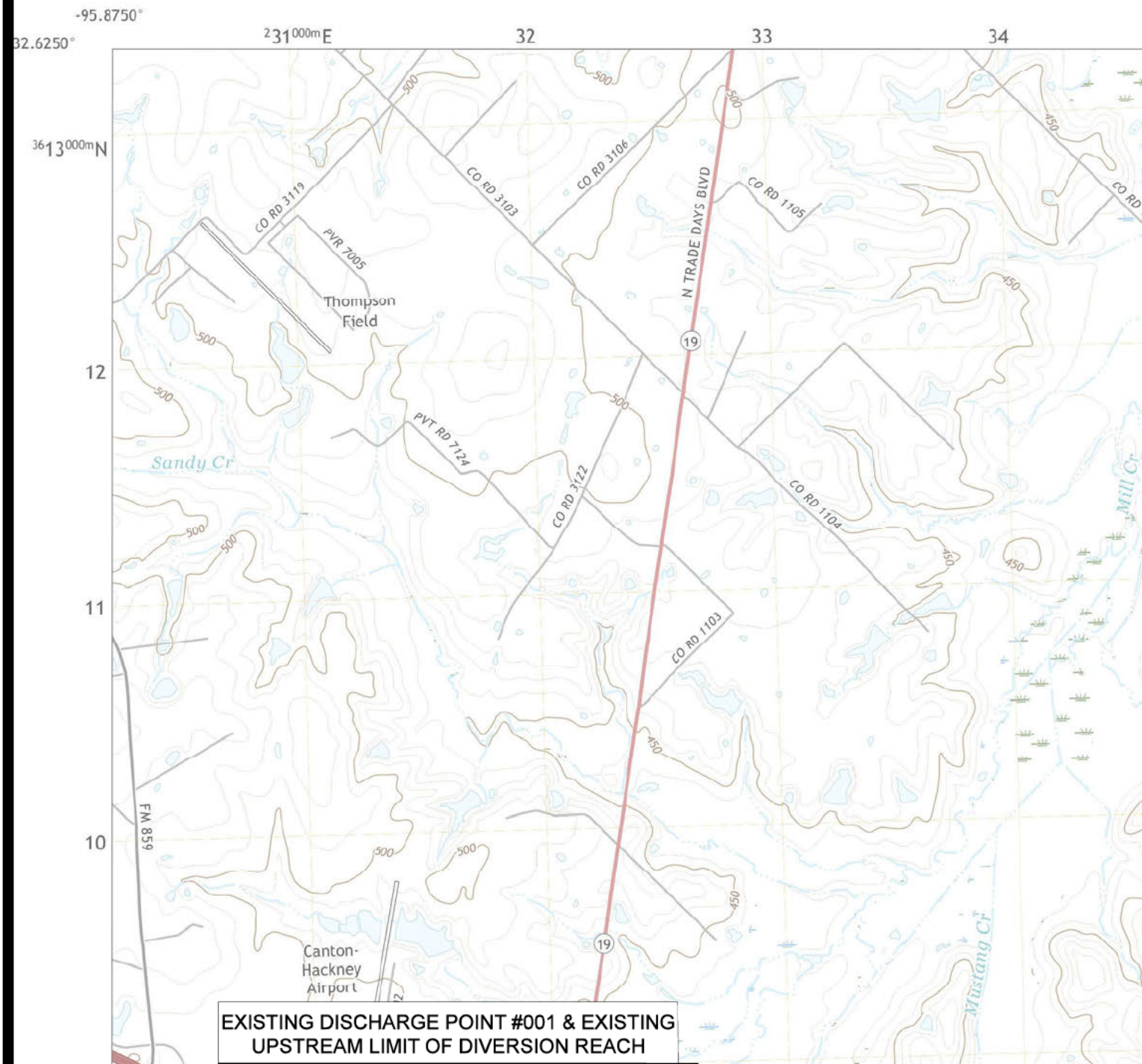
Worksheet 5.0, Item 2.a., pg.18 (Comment 15)

No new diversion structures are proposed (See Exhibit 4B, pg. 5). The applicant's existing diversion structure to its drinking water plant will be used.

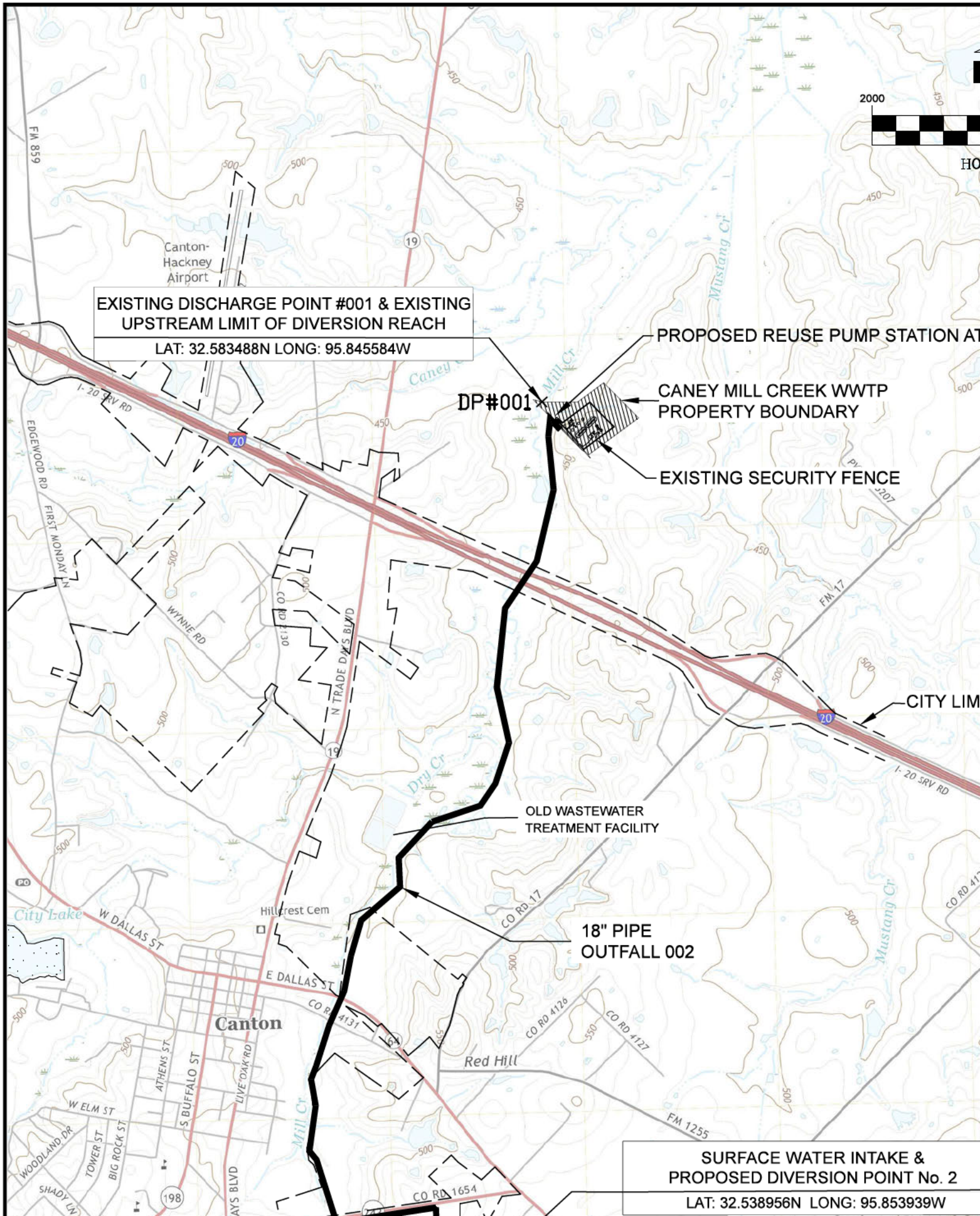
Worksheet 5.0, Item 2.b., pg.19 (Comment 13)

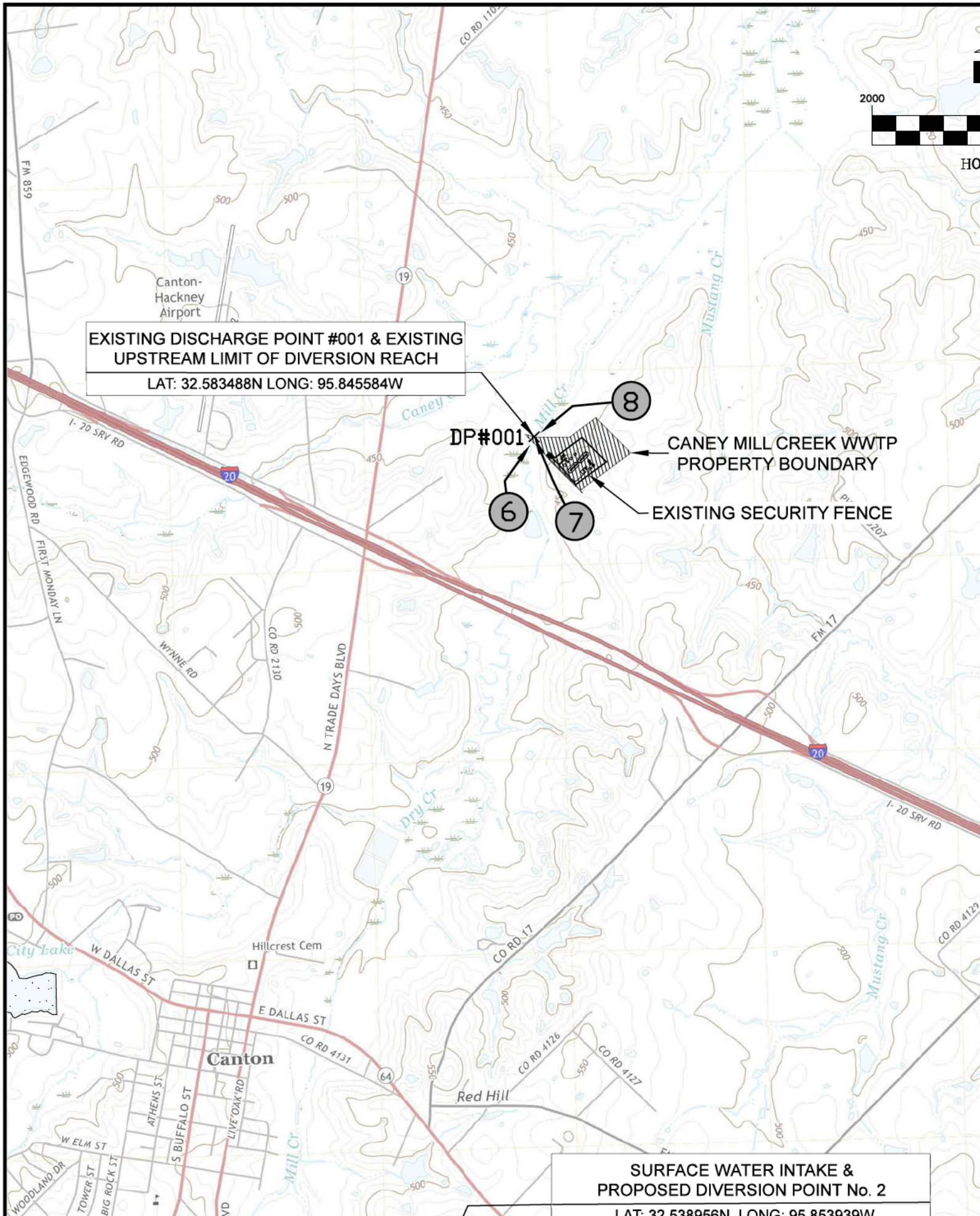
The Application requests to discharge and subsequently divert ground and surface water-based return flows. The amount of water diverted will be will not exceed the amount of water discharged. Therefore, there will be no changes to downstream instream flows or freshwater inflows.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



EXISTING DISCHARGE POINT #001 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH


EXISTING DISCHARGE POINT #001 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH
LAT: 32.583488N LONG: 95.845584W
DP#001
PROPOSED REUSE PUMP STATION AT
CANEY MILL CREEK WWTP PROPERTY BOUNDARY
EXISTING SECURITY FENCE
CITY LIM
OLD WASTEWATER TREATMENT FACILITY
18" PIPE OUTFALL 002
SURFACE WATER INTAKE & PROPOSED DIVERSION POINT No. 2
LAT: 32.538956N LONG: 95.853939W
Canton-Hackney Airport
Canton
Red Hill
Hillcrest Cem
City Lake
Mill Cr
Mustang Cr
Dry Cr
Caney Cr
FM 859
I- 20 SRV RD
EDGEWOOD RD
FIRST MONDAY LN
WYNNE RD
N TRADE DAYS BLVD
CO RD 130
FM 17
CO RD 17
CO RD 4126
CO RD 4127
CO RD 4131
CO RD 1654
FM 1255
W DALLAS ST
E DALLAS ST
S BUFFALO ST
ATHENS ST
LIVE OAK RD
W ELM ST
WOODLAND DR
TOWER ST
BIG ROCK ST
SHADY LN
2000


2000
EXISTING DISCHARGE POINT #001 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH
LAT: 32.583488N LONG: 95.845584W
DP#001
8
6
7
CANEY MILL CREEK WWTP PROPERTY BOUNDARY
EXISTING SECURITY FENCE
SURFACE WATER INTAKE & PROPOSED DIVERSION POINT No. 2
LAT: 32.538956N LONG: 95.853939W
Canton-Hackney Airport
FM 859
CO RD 110
I- 20 SRV RD
EDGEWOOD RD
FIRST MONDAY LN
WYNNE RD
CO RD 2130
N TRADE DAYS BLVD
FM 17
Caney Mill Cr
Mustang Cr
Dry Cr
Hillcrest Cem
City Lake
W DALLAS ST
E DALLAS ST
CO RD 4131
Canton
CO RD 17
CO RD 4126
CO RD 4127
CO RD 4129
Red Hill
W ELM ST
S BUFFALO ST
ATHENS ST
LIVE OAK RD
WOODLAND DR
TOWER ST
BIG ROCK ST

CITY OF CANTON
WWTP DISCHARGE RATES
2015-2019

Date	Total Flow	Total Flow	Days/Month	Average Flow	Permit Limit	90% Permit Limit	75% Permit Limit	12 Month Average Flow
	gal	MG		MGD	MGD	MGD	MGD	MGD
Jan-15	25372000	25.372	31	0.818	1.3	1.17	0.975	
Feb-15	23494000	23.494	28	0.839	1.3	1.17	0.975	
Mar-15	34515000	34.515	31	1.113	1.3	1.17	0.975	
Apr-15	32146000	32.146	30	1.072	1.3	1.17	0.975	
May-15	35562000	35.562	31	1.147	1.3	1.17	0.975	
Jun-15	26948000	26.948	30	0.898	1.3	1.17	0.975	
Jul-15	15589000	15.589	31	0.503	1.3	1.17	0.975	
Aug-15	10072000	10.072	31	0.325	1.3	1.17	0.975	
Sep-15	13206000	13.206	30	0.440	1.3	1.17	0.975	
Oct-15	28685000	28.685	31	0.925	1.3	1.17	0.975	
Jan-16	27602000	27.602	31	0.890	1.3	1.17	0.975	
Feb-16	20560000	20.56	29	0.709	1.3	1.17	0.975	0.807
Mar-16	30245000	30.245	31	0.976	1.3	1.17	0.975	0.820
Apr-16	29005000	29.005	30	0.967	1.3	1.17	0.975	0.830
May-16	25226000	25.226	31	0.814	1.3	1.17	0.975	0.805
Jun-16	21761000	21.761	30	0.725	1.3	1.17	0.975	0.777
Jul-16	21877000	21.877	31	0.706	1.3	1.17	0.975	0.740
Aug-16	21487000	21.487	31	0.693	1.3	1.17	0.975	0.723
Sep-16	18799000	18.799	30	0.627	1.3	1.17	0.975	0.733
Oct-16	21187000	21.187	31	0.683	1.3	1.17	0.975	0.763
Nov-16	23958000	23.958	30	0.799	1.3	1.17	0.975	0.793
Dec-16	24731000	24.731	31	0.798	1.3	1.17	0.975	0.782
Jan-17	27849000	27.849	31	0.898	1.3	1.17	0.975	0.783
Feb-17	23533000	23.533	28	0.840	1.3	1.17	0.975	0.794
Mar-17	28711000	28.711	31	0.926	1.3	1.17	0.975	0.790
Apr-17	25668000	25.668	30	0.856	1.3	1.17	0.975	0.780
May-17	24458000	24.458	31	0.789	1.3	1.17	0.975	0.778
Jun-17	26469000	26.469	30	0.882	1.3	1.17	0.975	0.791
Jul-17	16783000	16.783	31	0.541	1.3	1.17	0.975	0.778
Aug-17	24512000	24.512	31	0.791	1.3	1.17	0.975	0.786
Sep-17	15356000	15.356	30	0.512	1.3	1.17	0.975	0.776

CITY OF CANTON

WWTP DISCHARGE RATES

2015-2019

Oct-17	18479000	18.479	31	0.596	1.3	1.17	0.975	0.769
Nov-17	19005000	19.005	30	0.634	1.3	1.17	0.975	0.755
Dec-17	17987000	17.987	31	0.580	1.3	1.17	0.975	0.737
Jan-18	18612000	18.612	31	0.600	1.3	1.17	0.975	0.712
Feb-18	25195000	25.195	28	0.900	1.3	1.17	0.975	0.717
Mar-18	22929000	22.929	31	0.740	1.3	1.17	0.975	0.702
Apr-18	16800000	16.8	30	0.560	1.3	1.17	0.975	0.677
May-18	17670000	17.67	31	0.570	1.3	1.17	0.975	0.659
Jun-18	23921000	23.921	30	0.797	1.3	1.17	0.975	0.652
Jul-18	23500100	23.5001	31	0.758	1.3	1.17	0.975	0.670
Aug-18	22875000	22.875	31	0.738	1.3	1.17	0.975	0.665
Sep-18	21947000	21.947	30	0.732	1.3	1.17	0.975	0.684
Oct-18	28854000	28.854	31	0.931	1.3	1.17	0.975	0.712
Nov-18	31573000	31.573	30	1.052	1.3	1.17	0.975	0.747
Dec-18	34978000	34.978	31	1.128	1.3	1.17	0.975	0.792
Jan-19	34665000	34.665	31	1.118	1.3	1.17	0.975	0.835
Feb-19	27815000	27.815	28	0.993	1.3	1.17	0.975	0.843
Mar-19	29998000	29.998	31	0.968	1.3	1.17	0.975	0.862
Apr-19	29999000	29.999	30	1.000	1.3	1.17	0.975	0.899
May-19	43600000	43.6	31	1.406	1.3	1.17	0.975	0.969
Jun-19	25951000	25.951	30	0.865	1.3	1.17	0.975	0.974

Basis2 Receipt Report by Endorsement Number

JUN-22-20 08:34 AM

Acct. #: PTGU **Account Name:** NOTICE FEES WUP WATER USE PERMITS

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
	M019892	ADJ054675B	CANTON, CITY OF	CK	743548		BS00080734	28-MAY-20	$163.56

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 6, 2020

Mr. Gary Burton
Capco Engineering, Inc.
13044 CR 192
Tyler, TX 75703

VIA E-MAIL

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042, Requiring Published and Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

Dear Mr. Burton:

This acknowledges receipt, on May 1, 2020, of the applicant's request for an extension of time to respond to the Texas Commission on Environmental Quality letter dated April 29, 2020.

An extension is granted until July 29, 2020 and after that date the application may be returned pursuant to Title 30 Texas Administrative Code § 281.18. No further extensions will be granted associated with this request for information.

If you have any questions concerning this matter please contact Sarah Henderson via email at sarah.henderson@tceq.texas.gov or by telephone at (512) 239-2535.

Sincerely,

Amy Settemeyer

Amy Settemeyer, Manager
Water Rights Permitting & Availability Section
Water Availability Division

AS/sh

CAPCO ENGINEERING INC.

May 1, 2020

Sarah Henderson
Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042, Requiring Published and Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

Dear Ms. Henderson:

I have received your RFI dated April 29, 2020 and asking for a response by May 29, 2020. Due to the Covid19 pandemic, the City of Canton has had to discontinue the monthly First Monday Trade Days. This event is a major source of income for the city. Due to this reduction in revenue, the city has had to likewise cut back on spending. I have been directed by the City Manager to ask for an extension to the 30-day time limit. We are asking for a 60-day extension to July 29, 2020.

Thank you for your consideration and the prompt review of our application. Please contact me with any questions or requests for further information at 903-531-9670 or [redacted]

Sincerely,

Gary L. Burton, III, PE

Cc: Lonny Cluck <[redacted]
Emily Rogers

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 29, 2020

Mr. Gary Burton
Capco Engineering, Inc.
13044 CR 192
Tyler, TX 75703

VIA E-MAIL

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Application No. 05-4675B to Amend Certificate of Adjudication No. 05-4675
Texas Water Code §§ 11.121, 11.042, Requiring Published and Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

Dear Mr. Burton:

This acknowledges receipt, on January 27, 2020, of the referenced water use permit application and fees in the amount of $112.50 (Receipt No. M011897, copy enclosed).

Additional information and fees are required before the application can be declared administratively complete.

1. Revise the application summary to be consistent with the changes to the application below.

2. Confirm that the application is requesting an additional bed and banks authorization to convey and subsequently divert its groundwater-based and surface water-based return flows.

3. Clarify the request to remove streamflow restrictions associated with the current authorization to reuse groundwater-based return flows. Staff notes that streamflow restrictions will continue to apply to any return flows discharged to Mill Creek and subsequently diverted from Mill Creek downstream of Mill Creek Reservoir.

4. Confirm that the application requests to shorten the existing authorized diversion reach on Mill Creek. Staff notes that changing the length of the existing diversion reach will not affect the current streamflow restrictions on return flows discharged to Mill Creek and subsequently diverted from Mill Creek downstream of Mill Creek Reservoir.

5. Revise Worksheet 1.0 to remove the information provided. This information is not necessary if the City of Canton is not requesting an increase in the total volume of return flows authorized for reuse under Certificate of Adjudication No. 05-4675, as amended.

6. Confirm that the location of proposed Diversion Point 3 is intended to represent a point on the perimeter of Mill Creek Reservoir. The application summary in the Administrative

Information Report indicates that the proposed diversion point is located at the applicant's surface water treatment plant.

7. Clarify whether the proposed diversion rate on all Worksheets 3.0 is in addition to the diversion rate currently authorized for diversions from Mill Creek Reservoir, as authorized in Certificate of Adjudication No. 05-4675 and/or whether the diversion rate is in combination with the diversion rate authorized for reuse of return flows, as authorized in Certificate of Adjudication 05-4675A. Staff notes Item 1.c. is marked 'N'.

8. Provide the method for the calculation of losses (0%) indicated in Worksheet 4.0, Item b.

9. Revise Worksheet 4.0. Item b.5 to identify the base water right number for the surface water-based return flows requested for discharge to Mill Creek Reservoir.

10. Remove information provided in Worksheet 4.0, Section c. Staff notes that this section of the application relates to discharge of groundwater, not groundwater-based return flows.

11. Confirm the location of the proposed discharge point on Mill Creek Reservoir and whether the intent is to identify a point on the perimeter of the reservoir as the discharge point. The coordinates provided on Worksheet 4.1 are not consistent with the maps. Staff notes that Item F in the supplemental information for Worksheet 1.2 indicates that the proposed discharge point is upstream of the reservoir and that Bullet point 4 in the accounting plan introduction indicates that the discharge point is on an unnamed tributary of the reservoir. Revise worksheets and/or maps accordingly to reflect a consistent location for the proposed discharge point.

12. Remove the version of Worksheet 4.1 submitted for the existing discharge point. Staff notes the City of Canton is not requesting any additional water to be discharged at that point.

13. Provide a response to Worksheet 5.0, Item 2.b. on page 19 of the Technical Information Report regarding the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.

14. Revise the accounting plan discussion to be consistent with the requests in the application.

15. Indicate any measures the applicant will take to avoid entrainment and impingement of aquatic organisms in any new diversion structures.

16. Confirm that the place of use in the application continues to be Van Zandt County within the Sabine River Basin, as currently authorized in Certificate of Adjudication 05-4675, as amended.

17. Remit fees in the amount of **$163.56** as described below. Please make checks payable to the TCEQ or Texas Commission on Environmental Quality.

Filing Fee (Amendment)	$ 100.00
Recording Fee	$ 12.50
Notice Fee (Sabine River Basin)*	$ 163.56*
Total Fees	$ 0.00
Fees Received	$ 112.50
Fees Due	$ 163.56

*Notice requirements and fees are subject to change dependent upon applicant's response to the above items.

Please provide the requested information by May 29, 2020 or the application may be returned pursuant to Title 30 Texas Administrative Code § 281.18.

If you have any questions concerning this matter, please contact me via email at sarah.henderson@tceq.texas.gov or by telephone at (512) 239-2535.

Sincerely,

Sarah E Henderson

Sarah Henderson, Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality

Attachment

Basis2 Receipt Report by Endorsement Number

APR-29-20 08:21 AM

Acct. #: WUP **Account Name:** WATER USE PERMITS

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
	M011897	ADJ054675A	CANTON, CITY OF	CK	742692		BS00078195	21-JAN-20	$112.50

CAPCO
ENGINEERING INC.

RECEIVED
JAN 27 2020
Water Availability Division

January 21, 2020

Executive Director
Water Availability Division (MC-160)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

RE: City of Canton
Cert. of Adj. No. 05-4675A
TPDES Permit No. 0010399002
EPA ID No. TX0099112
RN101610574, CN600736086

Dear Project Manager:

Attached, please find a letter of signature authorization and one original and six copies of a Water Rights Permitting Application to update the referenced Certificate of Adjudication No. 05-4675A.

The application filing fee of $112.50 has been sent to the proper address and a copy of the check is enclosed for your reference.

Thank you for your cooperation in this matter. Should you have any questions or require additional information, please contact me at (903) 531-9671 or garyb@capco-engineering.com.

Sincerely,

Gary L. Burton, III, P.E.
Project Engineer

ENCLOSURES

CC: Lonny Cluck – City of Canton *(ltr)*
Rick Malone – City of Canton *(ltr)*
Debra Johnson – City Secretary *(w/encl)*

CITY OF CANTON

TCEQ WATER RIGHTS PERMITTING APPLICATION

Amendment to the Certificate of Adjudication No. 05-4675A

TPDES PERMIT NO. 0010399002
EPA ID NO. TX0099112

December 2019

Prepared By:

CAPCO ENGINEERING INC.

Civil and Environmental Engineering
13044 CR 192, TYLER, TX 75703 – TEL. 903.531.9670
(F-4347)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ WATER RIGHTS PERMITTING APPLICATION

ADMINISTRATIVE INFORMATION CHECKLIST

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

APPLICANT(S): City of Canton

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

Y/N		Y/N	
Y	**Administrative Information Report**	Y	**Worksheet 3.0**
N	Additional Co-Applicant Information	Y	Additional W.S 3.0 for each Point
N	Additional Co-Applicant Signature Pages	Y	Recorded Deeds for Diversion Points
Y	Written Evidence of Signature Authority	N	Consent For Diversion Access
Y	**Technical Information Report**	Y	**Worksheet 4.0**
Y	USGS Map (or equivalent)	Y	TPDES Permit(s)
Y	Map Showing Project Details	Y	WWTP Discharge Data
Y	Original Photographs	N	24-hour Pump Test
N	Water Availability Analysis	N	Groundwater Well Permit
Y	**Worksheet 1.0**	N	Signed Water Supply Contract
N	Recorded Deeds for Irrigated Land	Y	**Worksheet 4.1**
N	Consent For Irrigation Land	Y	**Worksheet 5.0**
N	**Worksheet 1.1**	N	Addendum to Worksheet 5.0
N	Addendum to Worksheet 1.1	N	**Worksheet 6.0**
Y	**Worksheet 1.2**	Y	Water Conservation Plan(s)
Y	Addendum to Worksheet 1.2	N	Drought Contingency Plan(s)
N	**Worksheet 2.0**	N	Documentation of Adoption
N	Additional W.S 2.0 for Each Reservoir	Y	**Worksheet 7.0**
N	Dam Safety Documents	Y	Accounting Plan
N	Notice(s) to Governing Bodies	Y	**Worksheet 8.0**
N	Recorded Deeds for Inundated Land	Y	Fees
N	Consent For Inundation Land		

For Commission Use Only:
Proposed/Current Water Right Number: _____
Basin: _____ Watermaster area Y/N: _____

RECEIVED
JAN 27 2020
Water Availability Division

ADMINISTRATIVE INFORMATION REPORT

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

****Applicants are strongly encouraged to schedule a pre-application meeting with TCEQ Staff to discuss Applicant's needs prior to submitting an application. Call the Water Rights Permitting Team to schedule a meeting at* (512) 239-4691.

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

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

_____New Appropriation of State Water

X_____Amendment to a Water Right *

_____ Bed and Banks

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

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

1) Applicant seeks to amend Cert. of Adj. No. 05-4675A to add a second diversion point for the 865 acre-feet per year return flows. The second diversion point is the Applicant's surface water treatment plant. 2) Applicant also seeks to use the bed and banks of a 0.04 mile reach of an unnamed tributary of Mill Creek Reservoir and / or Mill Creek Reservoir to convey up to 865 acre-feet per year. There will be no conveyance losses and Applicant does not request to store the return flows in Mill Creek Reservoir. 3) Applicant also seeks to remove the stream flow restriction for diversion of groundwater- based return flows. 4) Applicant also seeks to relocate the existing downstream reach limit to reduce the length of the existing reach from 7.1 to 0.3 mi.

2. APPLICANT INFORMATION (Instructions, Page. 6)

a. Applicant

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

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

City of Canton

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

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

CN : 600736086 (leave blank if you do not yet have a CN).

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

First/Last Name: Lonny Cluck

Title: City Manager

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

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

Name: City of Canton

Mailing Address: P.O. Box 245

City: Canton State: Texas ZIP Code: 75103-0245

Indicate an X next to the type of Applicant:

___Individual	___Sole Proprietorship-D.B.A.
___Partnership	___Corporation
___Trust	___Estate
___Federal Government	___State Government
___County Government	X City Government
___Other Government	___Other_____

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

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

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

First and Last Name: Gary Burton

Title: Project Engineer

Organization Name: Capco Engineering, Inc.

Mailing Address: 13044 CR 192

City: Tyler State: Texas ZIP Code: 75703

Phone No.: 903-531-9671 Extension:

Fax No.: 903-531-9675 E-mail Address: [redacted]

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

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

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

First and Last Name:

Title:

Organization Name:

Mailing Address:

City: State: ZIP Code:

Phone No.: Extension:

Fax No.: E-mail Address:

5. MISCELLANEOUS INFORMATION (Instructions, Page. 9)

a. The application will not be processed unless all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol by all applicants/co-applicants. If you need assistance determining whether you owe delinquent penalties or fees, please call the Water Rights Permitting Team at (512) 239-4691, prior to submitting your application.

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

   If **yes**, provide the following information:
   Account number: Amount past due:

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

   If **yes**, please provide the following information:
   Enforcement order number: Amount past due:

b. If the Applicant is a taxable entity (corporation or limited partnership), the Applicant must be in good standing with the Comptroller or the right of the entity to transact business in the State may be forfeited. See Texas Tax Code, Subchapter F. Applicant's may check their status with the Comptroller at https://mycpa.cpa.state.tx.us/coa/

   Is the Applicant or Co-Applicant in good standing with the Comptroller? **Yes / No** Y

c. The commission will not grant an application for a water right unless the applicant has submitted all Texas Water Development Board (TWDB) surveys of groundwater and surface water use – if required. See TWC §16.012(m) and 30 TAC § 297.41(a)(5).

Applicant has submitted all required TWDB surveys of groundwater and surface water? **Yes / No** Y

6. SIGNATURE PAGE (Instructions, Page. 11)

Applicant:

I, Lonny Cluck City Manager

(Typed or printed name) (Title)

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

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

Signature: Lonny Cluck Date: 01/10/2020

(Use blue ink)

Subscribed and Sworn to before me by the said

on this 10th day of January, 2020.

My commission expires on the 11th day of July, 2023.

DEBRA JOHNSON NOTARY PUBLIC STATE OF TEXAS ID# 580 EXPIRES 7-11-2023

Notary Public

Van Zandt

County, Texas

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

City of Canton

201 N. Buffalo
Canton, Texas 75103

Administration - 903.567.1841
Water Dept. - 903.567.2826
First Monday - 903.567.6556

January 13, 2020

Executive Director
Texas Commission on Environmental Quality
Attn: Water Availability Division
Application Review and Processing Team (MC160)
12100 Park 35 Circle
Austin TX 78753

RE: City of Canton
Certificate of Adjudication No. 05-4675A
TPDES Permit No. 0010399002
EPA ID No. TX0099112
RN101610574, CN600736086

Executive Director:

This letter is to serve as authorization for Lonny Cluck, City Manager to sign the referenced permit application as a duly authorized representative for the City of Canton. Mr. Cluck has overall operation of the regulated facility. Should you have any questions or require additional information, please call me.

Respectfully Submitted,

Lou Ann Everett

Lou Ann Everett
Mayor

CC: Lonny Cluck – City of Canton
Gary L. Burton, III, P.E. – Capco Engineering, Inc.

TECHNICAL INFORMATION REPORT
WATER RIGHTS PERMITTING

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

Applicants are strongly encouraged to schedule a pre-application meeting with TCEQ Permitting Staff to discuss Applicant's needs and to confirm information necessary for an application prior to submitting such application. Please call Water Availability Division at (512) 239-4691 to schedule a meeting. Applicant attended a pre-application meeting with TCEQ Staff for this Application? **Y / N** Y (If yes, date : June 5, 2019).

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

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

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

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

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

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

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

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

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

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

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

This section should be completed if Applicant owns an existing water right and Applicant requests to amend the water right. ***If Applicant is not currently the Owner of Record in the TCEQ Records, Applicant must submit a Change of Ownership Application (TCEQ-10204) prior to submitting the amendment Application or provide consent from the current owner to make the requested amendment.*** **See instructions page. 6.**

Water Right (Certificate or Permit) number you are requesting to amend: 05-4675A

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

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

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

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

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

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

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

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

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

If yes, submit: **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for each diversion point or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach)

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

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

f. Other - Applicant requests to change any provision of an authorization not mentioned above?**Y / N** N *If yes, call the Water Availability Division at (512) 239-4691 to discuss.*

Additionally, all amendments require:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Worksheets and information:

- **Worksheet 1.0 – Quantity, Purpose, and Place of Use Information Worksheet**
- **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir owned by the applicant through which water will be conveyed or diverted)
- **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for the downstream limit of each diversion reach for the proposed conveyances)
- **Worksheet 4.0 – Discharge Information Worksheet** (for each discharge point)
- **Worksheet 5.0 – Environmental Information Worksheet**
- **Worksheet 6.0 – Water Conservation Information Worksheet**
- **Worksheet 7.0 – Accounting Plan Information Worksheet**
- **Worksheet 8.0 – Calculation of Fees; and Fees calculated – see instructions Page. 34**
- **Maps** – See instructions **Page. 15.**
- **Additional Documents and Worksheets may be required (see within).**

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

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

The City of Canton is located within the Region D Planning Group. The application is consistent with the 2017 State Water Plan, which supports indirect reuse in a broad sense, identifying reuse as a valuable and competitive water supply option in Texas. In addition, the project described in the application has also been specifically included in the 2016 Reg. D Water Plan as a water management strategy on page 5-109,-110.

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

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

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

WORKSHEET 1.0
Quantity, Purpose and Place of Use

1. New Authorizations (Instructions, Page. 16)

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

Quantity (acre-feet) *(Include losses for Bed and Banks)*	**State Water Source (River Basin) or Alternate Source** *each *alternate source (and new appropriation based on return flows of others) also requires completion of Worksheet 4.0*	**Purpose(s) of Use**	**Place(s) of Use** **requests to move state water out of basin also require completion of Worksheet 1.1 Interbasin Transfer*

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

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

1. Location Information Regarding the Lands to be Irrigated
   i) Applicant proposes to irrigate a total of _____acres in any one year. This acreage is all of or part of a larger tract(s) which is described in a supplement attached to this application and contains a total of _____ acres in _____County, TX.
   ii) Location of land to be irrigated: In the _____Original Survey No. _____, Abstract No._____.
   A copy of the deed(s) or other acceptable instrument describing the overall tract(s) with the recording information from the county records must be submitted. Applicant's name must match deeds.
   If the Applicant is not currently the sole owner of the lands to be irrigated, Applicant must submit documentation evidencing consent or other documentation supporting Applicant's right to use the land described.

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

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

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

Quantity (acre-feet)	Existing Purpose(s) of Use	Proposed Purpose(s) of Use*	Existing Place(s) of Use	Proposed Place(s) of Use**
865	Industrial & Municipal	Industrial & Municipal	City of Canton	City of Canton
865	Industrial & Municipal	Industrial & Municipal	City of Canton	City of Canton

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

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

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

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

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

ii) Location of land to be irrigated: In the _____Original Survey No. _____, Abstract No._____.

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

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

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

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

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

WORKSHEET 1.2
NOTICE. "THE MARSHALL CRITERIA"

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

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

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

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

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

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

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

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

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

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

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

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

WORKSHEET 1.2
"THE MARSHALL CRITERIA"

a) Administrative Requirements and Fees

This application provides relevant information to address the administrative requirements of 30 TAC § 295, Subchapter A and the requirements of Texas Water Code Chapter 11. In accordance with 30 TAC § 295.131 and other TCEQ rules relating to fees, the City is submitting payment of $112.50 with this application. With filing this application, the City requests a determination of any additional fees that may be required. Upon receipt of such determination, the City will forward such fees to the TCEQ.

b) Beneficial Use

Texas Water Code §11.134(b)(3)(A) requires that proposed appropriations of water be intended for a beneficial use. The "beneficial use" of water is defined in Texas Water Code §11.002(4) and 30 TAC §297.1(8) as the use of water "which is economically necessary for a purpose authorized by [Chapter 11 of the Texas Water Code]." An "industrial" purpose of use is identified in Texas Water Code §11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC §297.1(24) to include "the use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value." A "municipal" purpose of use is identified in Texas Water Code § 11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC §297.1(32) to include "the use of potable water within a community or municipality and its environs for domestic, recreation, commercial, or industrial purposes or for the water of golf courses, parks and parkways, or the use of reclaimed water in lieu of potable water for the preceding purposes." Certificate of Adjudication 05-4675A is authorized for municipal and industrial uses, and the proposed amendment does not change those uses.

c) Public Welfare

The proposed amendment will allow the City to transfer its already authorized 865 ac-ft/year of return flows to its existing surface water supply reservoir. This will have the effect of increasing the reservoir yield without increasing the normal pool elevation, which would reduce flood storage volume, and will provide a beneficial use of counteracting evaporation during periods of drought. Such action is not detrimental to the public welfare. Indeed, the proposed amendment will benefit the public welfare as it will allow the City to more efficiently utilize existing water supplies to address multiple demands for water.

d) Groundwater Assessment

In addition to the water the City receives from Mill Creek, the City obtains water from the Carrizo-Wilcox Aquifer. It has been the experience of the City of Canton and other Van Zandt County public water suppliers that wells in this area tend to decrease in production capacity over time. Reuse of its already authorized surface water and groundwater return flows

should have the effect of reducing the amount of groundwater needed to meet its demands in the future, thereby helping other wells to maintain production capacities. Attached in Exhibit 9 is a Summary of Surface Water and Groundwater Use for 5 Years based upon the City's monthly water operating reports from 2014 to 2018.

e) Consistency with State and Regional Water Plans

The City is located within the Region D Planning Group as noted in the Region D Plan found in the Texas Water Development Board's *Water for Texas 2017.* Water reuse is recognized under the State Water Plan as a recommended strategy which will supply 14% of all water management strategies by 2070.[1] Furthermore, the Region D Water Plan indicates estimated available water supply for Mill Creek during drought of record is 1,145 ac-ft[2], a reduction of 355 ac-ft/year from its original permitted yield of 1,500. Consequently, additional water supply is needed to meet current demands. The Indirect Reuse of 865 ac-ft/year already approved by Certificate of Adjudication (COA) 05-4675A was shown as a water management strategy for Canton in the 2016 Region D Plan. Shortly after completion of that plan, the COA Amendment was approved by TCEQ. We are not seeking to deviate from the 2016 Region D Plan or the 2017 State Water Plan. We are simply seeking to amend where those return flows are discharged and diverted to the City's water system.

f) Water Conservation, Drought Contingency and Avoidance of Waste

As defined in both 30 TAC §295.9 and Texas Water Code §11.002(8), "conservation" means those practices that will "reduce the consumption of water, reduce the loss or waste of water, *improve the efficiency in the use of water,* or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses." [Emphasis added]. By amending the Certificate to allow for a second wastewater effluent discharge location upstream of the surface water reservoir, the City will have the flexibility to more efficiently transfer the permitted return flows with less energy and less record keeping. By amending the Certificate to reduce the bed & banks reach from 7.1 to 0.3 miles, the bed & banks losses will be greatly reduced, resulting in further efficiency and avoidance of waste. Such efficiency, along with the City's water conservation and drought contingency plan, will allow the City to address its water supply needs in a manner that will allow it to avoid waste and achieve water conservation.

g) Impacts on Other Water Rights Holders or the Environment

By this application, the City merely seeks to allow for a second wastewater treatment plant discharge location for use during drought conditions in order to fully reuse its already permitted return flows arising from its use of groundwater or its surface water rights as contained in the amended Certificate, and to reduce the length of its permitted bed & banks diversion reach. The City's proposed amendment to more efficiently reuse its permitted return flows will not have an impact on other water right holders or the environment. The City *is* currently authorized to divert and fully consume up to 1,550 acre-feet of surface water per annum, *and* to reuse 865 acre-feet of return flows of combined surface and ground water per annum. Unless provided otherwise in a water right, there is no restriction against full

consumption of water authorized for diversion. While TCEQ has issued some water rights that require a certain percentage of return flows to the basin of origin, or an express limitation on consumption, the amended Certificate contains no such restriction. Pursuant to the "full use assumption" of Texas Water Code § ll.122(b), the City's use of its permitted 865 acre-feet return flows or its 1,550 acre-feet of water rights will not cause an adverse impact on other water rights holders or the environment of greater magnitude than if the City fully exercised its rights as currently authorized.

Moreover, groundwater-based return flows are non-native to the state water in the Sabine River Basin, and therefore the City's diversion and use of these return flows should have no impact on other water rights holders or the environment.

[1] Texas Water Development Board, *Water for Texas 2017,* pg. 90, available at http://www.twdb.texas.gov/waterplanning/swp/2017/doc/SWP17-Water-for-Texas.pdf?d=19143.194999545813

[2] Region D Planning Group, *North East Texas Regional Water Plan, Volume 2, Appendix C, Chapter 3,* pg. *55 of 72* (2016), available at http://www.twdb.texas.gov/waterplanning/rwp/plans/2016/D/Region_D_2016_RWPV2.pdf?d=5384.109999984503

WORKSHEET 3.0
DIVERSION POINT (OR DIVERSION REACH) INFORMATION

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

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

1. Diversion Information (Instructions, Page. 24)

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

1. _____Diversion Point No.
2. 1_____Upstream Limit of Diversion Reach No.
3. _____Downstream Limit of Diversion Reach No.

b. Maximum Rate of Diversion for **this new point** 6.03_____ cfs (cubic feet per second) or 2,708_____gpm (gallons per minute)

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

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

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

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

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

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

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

If yes, the drainage area is_____ sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4691, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Mill Creek

b. Zip Code: 75103

c. Location of point: In the Q. C. Nugent Original Survey No. _____, Abstract No. A-618, Van Zandt County, Texas.

A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure. For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to: a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.

d. Point is at:
Latitude 32.583488 °N, Longitude 95.845584 °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

e. Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): Certificate of Adjudication No. 05-4675A

f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.

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

WORKSHEET 3.0
DIVERSION POINT (OR DIVERSION REACH) INFORMATION

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

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

1. Diversion Information (Instructions, Page. 24)

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

1. _____Diversion Point No.
2. _____Upstream Limit of Diversion Reach No.
3. 2_____Downstream Limit of Diversion Reach No.

b. Maximum Rate of Diversion for **this new point** 6.03_____ cfs (cubic feet per second) or 2,708_____gpm (gallons per minute)

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

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

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

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

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

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

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

If yes, the drainage area is_____ sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4691, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Mill Creek

b. Zip Code: 75103

c. Location of point: In the Q. C. Nugent Original Survey No. _____, Abstract No. A-618, Van Zandt County, Texas.

A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure. For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to: a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.

d. Point is at:
Latitude 32.584275 °N, Longitude 95.844717 °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

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

f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.

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

WORKSHEET 3.0
DIVERSION POINT (OR DIVERSION REACH) INFORMATION

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

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

1. Diversion Information (Instructions, Page. 24)

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

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

b. Maximum Rate of Diversion for **this new point** 6.03 cfs (cubic feet per second) or 2,708 gpm (gallons per minute)

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

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

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

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

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

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

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

If yes, the drainage area is 9.7 sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4691, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Mill Creek (SCS Site No.1 Reservoir)

b. Zip Code: 75103

c. Location of point: In the J. Douthit Original Survey No. 467198, Abstract No. A-198, Van Zandt County, Texas.

A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure. For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to: a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.

d. Point is at:
Latitude 32.538956 °N, Longitude 95.853939 °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

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

f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.

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

WORKSHEET 4.0
DISCHARGE INFORMATION

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

a. The purpose of use for the water being discharged will be Industrial and municipal.

b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 0 % and explain the method of calculation:

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

1. The TPDES Permit Number(s). WQ0010399-002 (attach a copy of the **current** TPDES permit(s))

2. Applicant is the owner/holder of each TPDES permit listed above? **Y / N** Y

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

3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").

4. The percentage of return flows from groundwater 30%, surface water 70%?

5. If any percentage is surface water, provide the base water right number(s) 1,550 ac-ft/yr.

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

1. Source aquifer(s) from which water will be pumped: Carrizo - Wilcox

2. Any 24 hour pump test for the well if one has been conducted. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp. Additionally, provide well numbers or identifiers #4, 5, & 6.

3. Indicate how the groundwater will be conveyed to the stream or reservoir.
   Pumped from WWTP
4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.

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

cii. Identify any other source of the water None

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

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

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 865 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.

b. Water will be discharged at this point at a maximum rate of 6.03 cfs or 2,708 gpm.

c. Name of Watercourse as shown on Official USGS maps: Mill Creek

d. Zip Code: 75103

f. Location of point: In the Q. C. Nugent Original Survey No. _____, Abstract No. A-618, Van Zandt County, Texas.

g. Point is at:

Latitude 32.583488 °N, Longitude 95.845584 °W.

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

h. Indicate the method used to calculate the discharge point location (examples: Handheld GPS Device, GIS, Mapping Program): Certificate of Adjudication No. 05-4675A

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

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

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

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 865 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.

b. Water will be discharged at this point at a maximum rate of 6.03 cfs or 2,708 gpm.

c. Name of Watercourse as shown on Official USGS maps: Soil Conservation Service Site No. 1 Reservoir

d. Zip Code: 75103

f. Location of point: In the J. Douthit Original Survey No. 467198, Abstract No. A-198, Van Zandt County, Texas.

g. Point is at:

Latitude 32.538717629 °N, Longitude -95.847223214 °W.

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

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

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

WORKSHEET 5.0
ENVIRONMENTAL INFORMATION

This worksheet is required for new appropriations of water in the Canadian, Red, Sulphur, and Cypress Creek Basins. The worksheet is also required in all basins for: requests to change a diversion point, applications using an alternate source of water, and bed and banks applications. **Instructions, Page 28.**

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

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

a. Identify the appropriate description of the water body.

☐ Stream

■ Reservoir

Average depth of the entire water body, in feet: 12

☐ Other, specify: _____

b. Flow characteristics

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

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

☐ Intermittent with Perennial Pools - enduring pools

☐ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: _____

c. Waterbody aesthetics

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

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

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

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

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

d. Waterbody Recreational Uses

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

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

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

☐ Non-contact recreation

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

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

2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).

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

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

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

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

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

For all bed and banks applications:

a. Indicate the measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).

b. An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.

If the alternate source is treated return flows, provide the TPDES permit number WQ0010399-002

If groundwater is the alternate source, or groundwater or other surface water will be discharged into a watercourse provide:

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

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

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

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

WORKSHEET 7.0
ACCOUNTING PLAN INFORMATION WORKSHEET

The following information provides guidance on when an Accounting Plan may be required for certain applications and if so, what information should be provided. An accounting plan can either be very simple such as keeping records of gage flows, discharges, and diversions; or, more complex depending on the requests in the application. Contact the Surface Water Availability Team at 512-239-4691 for information about accounting plan requirements, if any, for your application. **Instructions, Page 34.**

1. Is Accounting Plan Required

Accounting Plans are generally required:

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

2. Accounting Plan Requirements

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

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

WORKSHEET 8.0
CALCULATION OF FEES

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

1. NEW APPROPRIATION

	Description	Amount ($)
Filing Fee	Circle fee correlating to the total amount of water* requested for any new appropriation and/or impoundment. Amount should match total on Worksheet 1, Section 1. Enter corresponding fee under **Amount ($).** In Acre-Feet a. Less than 100 $100.00 b. 100 - 5,000 $250.00 c. 5,001 - 10,000 $500.00 d. 10,001 - 250,000 $1,000.00 e. More than 250,000 $2,000.00	
Recording Fee		$25.00
Agriculture Use Fee	*Only for those with an Irrigation Use.* Multiply 50¢ x _____ Number of acres that will be irrigated with State Water. **	
Use Fee	*Required for all Use Types,* ***excluding Irrigation Use.*** Multiply $1.00 x _____ Maximum annual diversion of State Water in acre-feet. **	
Recreational Storage Fee	*Only for those with Recreational Storage.* Multiply $1.00 x _____ acre-feet of in-place Recreational Use State Water to be stored at normal max operating level.	
Storage Fee	*Only for those with Storage,* ***excluding Recreational Storage.*** Multiply 50¢ x _____ acre-feet of State Water to be stored at normal max operating level.	
Mailed Notice	Cost of mailed notice to all water rights in the basin. Contact Staff to determine the amount (512) 239-4691.	
	TOTAL	$

2. AMENDMENT *OR* SEVER AND COMBINE

	Description	Amount ($)
Filing Fee	Amendment: $100	$100
	OR Sever and Combine: $100 x ___of water rights to combine	
Recording Fee		$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	$ 112.5

3. BED AND BANKS

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

THE STATE OF TEXAS
COUNTY OF TRAVIS
I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A TEXAS COMMISSION ON ENVIRONMENTAL QUALITY DOCUMENT, WHICH IS FILED IN THE PERMANENT RECORDS

MAY 30 2018

OF THE COMMISSION. GIVEN UNDER MY HAND AND THE SEAL OF OFFICE ON

Bridget C. Bohac

BRIDGET C. BOHAC, CHIEF CLERK
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AMENDMENT TO A CERTIFICATE OF ADJUDICATION

CERTIFICATE NO. 05-4675A

TYPE §§ 11.122, 11.042, 11.046

Owner:	City of Canton	Address:	P.O. BOX 245 Canton, Texas 75103-0245
Filed:	May 6, 2009	Granted:	May 24, 2018
Purposes:	Municipal and Industrial	County:	Van Zandt
Watercourse:	Mill Creek, tributary of the Sabine River	Watershed:	Sabine River Basin

WHEREAS, Certificate of Adjudication 05-4675 authorizes the City of Canton (Owner/Applicant) to maintain an existing dam and reservoir located on Mill Creek, tributary of the Sabine River and impound therein not to exceed 2,261 acre-feet of water and to divert and use not to exceed 1,550 acre-feet of water per year from the perimeter of the reservoir at a maximum diversion rate of 3.33 cfs (1500 gpm) and from Mill Creek at a maximum diversion rate of 0.89 cfs (400 gpm) for municipal purposes in Van Zandt County; and

WHEREAS, the time priority of this right is April 19, 1954 for diversion and use of 50 acre-feet of water per year from Mill Creek; and

WHEREAS, the time priority of this right is January 5, 1970 for diversion and use of 1,500 acre-feet of water per year from the reservoir; and

WHEREAS, the Applicant owns and operates a treatment facility authorized under Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010399002 to discharge 1.3 MGD (1456.19 acre-feet per year); and

WHEREAS, the Applicant indicates that 30 percent of the discharged return flows originate from groundwater and 70 percent of the discharged return flows originate from surface water; and

WHEREAS, Applicant seeks to amend Certificate of Adjudication 05-4675 to authorize reuse of up to 1,456.19 acre-feet of its groundwater and surface water-based

return flows for industrial and municipal purposes in Van Zandt County, Sabine River Basin; and

WHEREAS, Applicant seeks authorization to use the bed and banks of Mill Creek, tributary of the Sabine River to convey the return flows; and

WHEREAS, Applicant indicates that the return flows will be discharged at a maximum discharge rate of 6.03 cfs (2,708 gpm) into Mill Creek at a point being Latitude 32.583488° N, Longitude 95.845584° W, in Van Zandt County; and

WHEREAS, Applicant indicates that the return flows will be diverted from a diversion reach on Mill Creek at a maximum rate of 6.03 cfs (2,708 gpm); and

WHEREAS, the upstream boundary of the diversion reach is located at Latitude 32.583488° N, Longitude 95.845584° W, in Van Zandt County; and

WHEREAS, the downstream boundary of the diversion reach is located at Latitude 32.685791° N, Longitude 95.830103° W, in Van Zandt County; and

WHEREAS, the Texas Commission on Environmental Quality finds that jurisdiction over the application is established; and

WHEREAS, the Executive Director determined that, in order to protect senior water rights in the Sabine River Basin, 437 acre-feet per year of groundwater-based return flows and 428 acre-feet per year of surface water-based return flows were available for reuse for a total reuse authorization of 865 acre-feet per year; and

WHEREAS, Applicant has provided, and the Executive Director has approved, an accounting plan (*CITY OF CANTON Reuse Permit Accounting Plan*); and

WHEREAS, the Executive Director recommends that special conditions be included in the amendment; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and rules of the Texas Commission on Environmental Quality in issuing this amendment;

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 5-4675, designated Certificate of Adjudication No. 5-4675A, is issued to the City of Canton subject to the following terms and conditions:

1. USE

In addition to previous authorizations, the Owner is authorized to use the bed and banks of Mill Creek to convey up to 437 acre-feet per year of groundwater-based return flows and 428 acre-feet per year of surface water-based return flows for a total reuse authorization of 865 acre-feet per year for subsequent diversion and use for industrial and municipal purposes in Van Zandt County, Sabine River Basin.

2. DISCHARGE

A. Applicant is authorized to discharge return flows at a point on Mill Creek located at Latitude 32.583488° N, Longitude 95.845584° W, in Van Zandt County, Texas.

B. At a maximum discharge rate of 6.03 cfs (2,708 gpm).

3. DIVERSION

Owner is authorized to divert its return flows at a maximum rate of 6.03 cfs (2,708 gpm) from a reach on Mill Creek in Van Zandt County between the following two points:

A. Upstream boundary of the diversion reach is located at Latitude 32.583488° N Latitude, Longitude 95.845584° W, in Van Zandt County.

B. Downstream boundary of the diversion reach is located at Latitude 32.685791° N, Longitude 95.830103° W, in Van Zandt County.

4. TIME PRIORITY

A. The time priority for diversion of surface water-based return flows under this amendment is May 6, 2009.

B. The groundwater-based return flows authorized to be conveyed via the bed and banks of a State watercourse in this permit do not have a priority date and are not subject to priority calls from downstream senior water rights.

5. CONSERVATION

Owner shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into on or after the effective date of the amendment, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

6. SPECIAL CONDITIONS

A. Ninety days prior to the diversion of surface water based return flows for industrial use, Owner or contract customer shall submit a water conservation plan to the TCEQ that meets the requirements of 30 TAC § 288.3.

B. Owner shall install a measurement device, prior to diversion of the return flows authorized in this amendment.

C. Owner shall not divert return flows unless streamflow exceeds the following streamflow restrictions at the measurement device, required by Paragraph 6.B. of this amendment, and subject to the requirements of Paragraph 6.D. below:

Season	Streamflow Restriction
Winter	6 cfs
Spring	3 cfs
Summer	1 cfs
Fall	1 cfs

cfs = cubic feet per second

D. Seasons are defined as follows: Winter (January - March), Spring (April - June), Summer (July - September), and Fall (October - December).

E. In order to minimize entrainment and impingement of aquatic organisms, Owner shall install screens on any new diversion structure(s).

F. Diversions authorized by this amendment are dependent upon potentially interruptible return flows or discharges and are conditioned on the availability of those discharges. The right to divert the discharged return flows is subject to revocation if discharges become permanently unavailable for diversion and may be subject to reduction if the return flows are not available in quantities and qualities sufficient to fully satisfy the amendment. Should the discharges become permanently unavailable for diversion, Owner shall immediately cease diversion of return flows and either apply to amend the certificate, or voluntarily forfeit the amendment. If the owner does not amend or forfeit the certificate, the Commission may begin proceedings to cancel this amendment.

G. Owner shall only divert and use return flows pursuant to Paragraph 1. USE and Paragraph 3. DIVERSION in accordance with the most recently approved accounting plan (*CITY OF CANTON Reuse Permit Accounting Plan*). Owner shall maintain the plan in electronic format and make it available upon request. Any modification to the accounting plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the Certificate terms must be in the form of an amendment to the Certificate. Should Owner fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Owner shall immediately cease diversion of discharged return flows, and either apply to amend the certificate, or voluntary forfeit the amendment. If Owner fails to amend the accounting plan or forfeit the amendment, the Commission may begin proceedings to cancel the amendment. Owner shall immediately notify the Executive Director upon modification of the accounting plan and provide copies of the appropriate

documents effectuating such changes.

H. Prior to diversion of return flows in excess of the amount currently authorized by TPDES Permit No. WQ0010399002, described in Paragraph 2. Discharge, Owner shall apply for and be granted the right to reuse those return flows. Owner shall amend the accounting plan to include these future return flows prior to diverting said return flows.

I. Owner shall allow representatives of the Texas Commission on Environmental Quality reasonable access to the property to inspect the measuring device and accounting plan.

J. The issuance of this amendment does not grant to the Owner the right to use private or public property for diversion of water authorized by this amendment. This includes property belonging to but not limited to any individual, partnership, corporation or public entity. Neither does this amendment authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the Owner to acquire property rights as may be necessary to make any diversion authorized by this amendment.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate of Adjudication No. 05-4675, except as specifically amended herein.

Diversion and reuse of surface water-based return flows under this amendment are subject to all superior and senior water rights in the Sabine River Basin.

Diversion and reuse of groundwater-based return flows under this amendment are subject to all superior water rights in the Sabine River Basin.

Owner agrees to be bound by the terms, conditions and provisions contained herein and such agreement is a condition precedent to the granting of this amendment.

All other matters requested in the application which are not specifically granted by this amendment are denied.

This amendment is issued subject to the Rules of the Texas Commission on Environmental Quality and to the right of continuing supervision of State water resources exercised by the Commission.

For the Commission

Date issued: **May 24, 2018**

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 30, 2018

Nathan Vassar
Lloyd Gosselink Rochelle & Townsend, P.C.
816 Congress Avenue, Suite 1900
Austin, Texas 78701-2478

RE: City of Canton
Certificate of Adjudication No. 05-4675A

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

You may file a **motion to overturn** with the chief clerk. A motion to overturn is a request for the commission to review the TCEQ executive director's approval of the application. Any motion must explain why the commission should review the TCEQ executive director's action. According to 30 TAC Section 50.139 an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

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

You may also request **judicial review** of the ED's approval. According to Texas Water Code Section 5.351 a person affected by the ED's approval must file a petition appealing the ED's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

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

Sincerely,

Bridget C. Bohac

Bridget C. Bohac
Chief Clerk

BCB/lg

cc: Vic McWherter, TCEQ Public Interest Counsel (MC 103)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 30, 2018

Mr. Nathan Vassar
Lloyd Gosselink Rochelle & Townsend, P.C.
816 Congress Avenue, Suite 1900
Austin, Texas 78701

RE: City of Canton
ADJ 4675
CN600736086, RN103183471
Certificate of Adjudication No. 05-4675A
Texas Water Code §§ 11.046, 11.042, 11.122, Requiring Limited Mailed Notice
Mill Creek, Sabine River Basin
Van Zandt County

Dear Mr. Vassar:

Enclosed is a certified copy of the above referenced document.

The applicant, City of Canton, is instructed to ensure that the official record of this water right is filed with the County Clerk of the county in which the appropriation is to be made.

The applicant is responsible for making payment arrangements with the Van Zandt County Clerk's Offices for filing its documents in the official records. Additional certified copies are enclosed for the purpose of filing with the appropriate County Clerk.

As proof of filing, please ensure that the enclosed cards are completed by Van Zandt County Clerk's Offices and returned to the Water Rights Permitting & Availability Section (MC 160), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

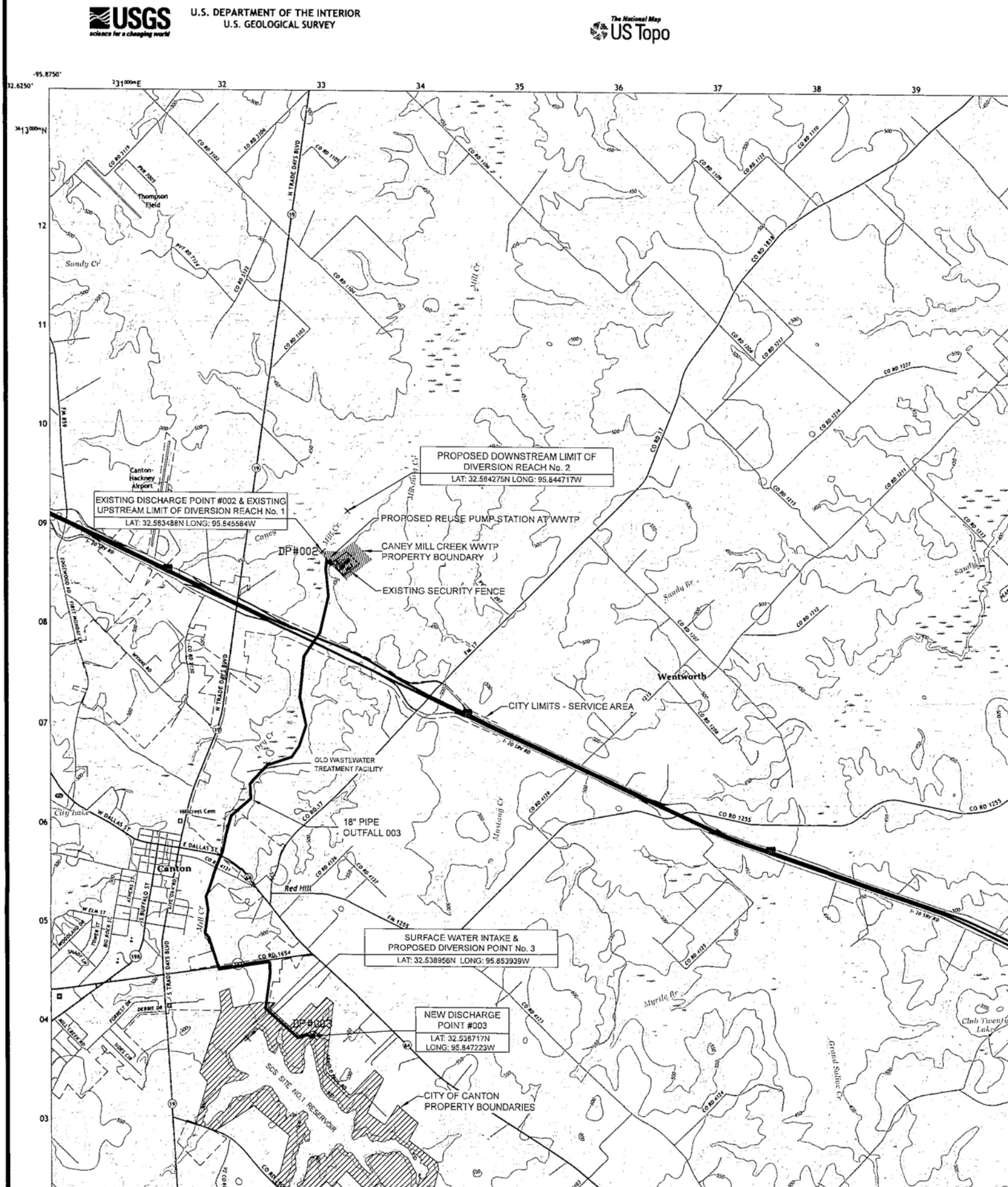
Should you have questions, please contact Mr. Samuel Sewell of the Texas Commission on Environmental Quality's Water Rights Permitting & Availability Section at (512) 239-4008, or if by correspondence, include MC 160 in the letterhead address below.

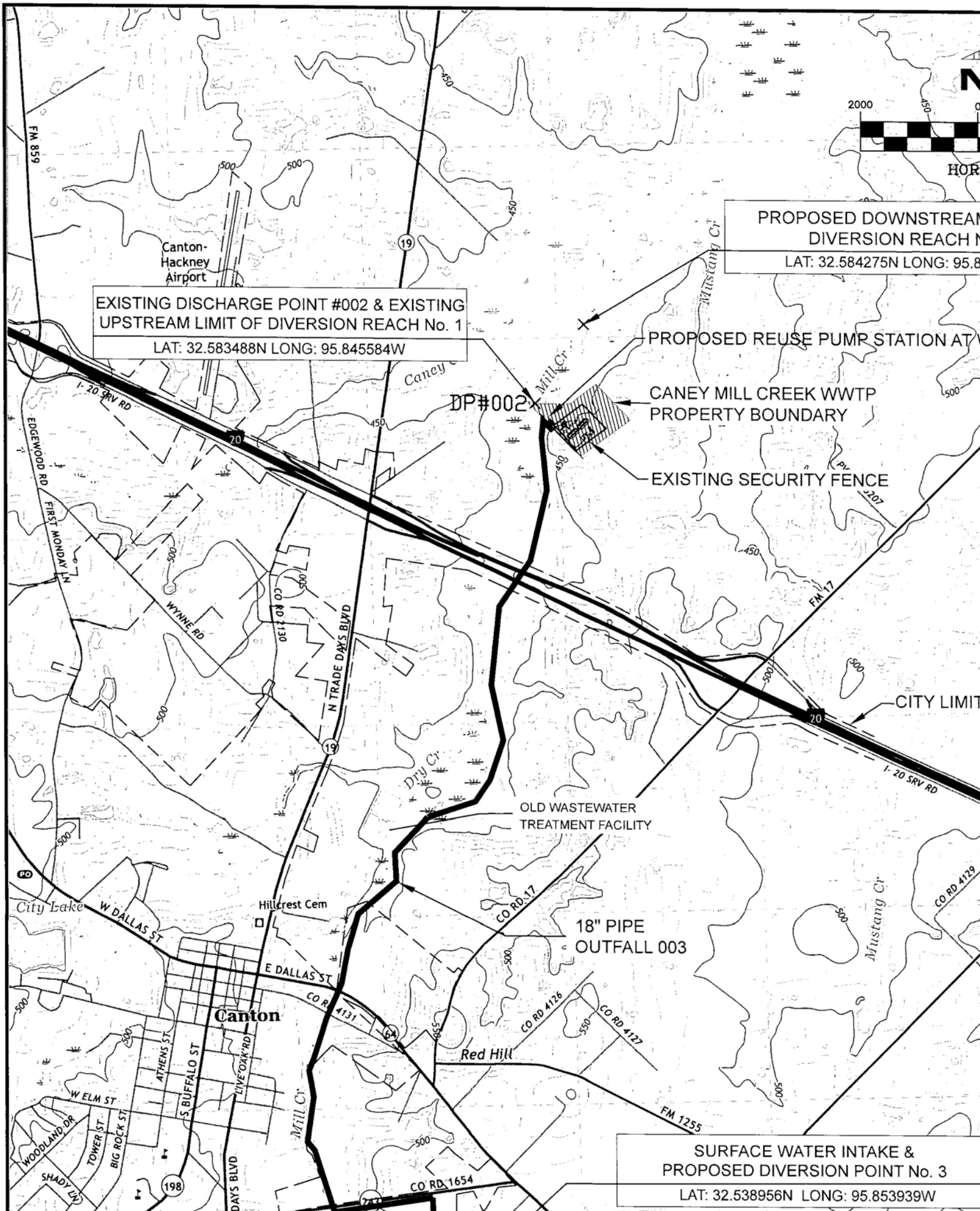
Sincerely,

Kim Wilson, Director
Water Availability Division

KW/oy

Enclosures


U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
The National Map
US Topo
-95.8750°
32.6250°
231000mE
34130000mN
PROPOSED DOWNSTREAM LIMIT OF DIVERSION REACH No. 2
LAT: 32.584275N LONG: 95.844717W
EXISTING DISCHARGE POINT #002 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH No. 1
LAT: 32.583488N LONG: 95.845584W
PROPOSED REUSE PUMP STATION AT WWTP
CANEY MILL CREEK WWTP PROPERTY BOUNDARY
EXISTING SECURITY FENCE
DP#002
CITY LIMITS - SERVICE AREA
OLD WASTEWATER TREATMENT FACILITY
18" PIPE OUTFALL 003
SURFACE WATER INTAKE & PROPOSED DIVERSION POINT No. 3
LAT: 32.538956N LONG: 95.853939W
NEW DISCHARGE POINT #003
LAT: 32.538717N LONG: 95.847223W
DP#003
CITY OF CANTON PROPERTY BOUNDARIES
SCS SITE NO.1 RESERVOIR
Canton
Wentworth
Red Hill
Thompson Field
Canton-Hackney Airport
Hillcrest Cem
Sandy Cr
Caney Cr
Mill Cr
Mustang Cr
Myrtle Br
Sandy Br
Org Cr
Cliff Lake
Club Twenty Lake
Grand Saline Cr
I-20 SW RD
W DALLAS ST
E DALLAS ST
W TRADE DAYS BLVD
S TRADE DAYS BLVD
FM 859
FM 17
FM 1255
CO RD 1654
CO RD 17
CO RD 4131
CO RD 4139
CO RD 4123
CO RD 4124
CO RD 1255
CO RD 1227
CO RD 1214
CO RD 1211
CO RD 1212
CO RD 1207
CO RD 1209
CO RD 1215
CO RD 1217
CO RD 1218
CO RD 1110
CO RD 1121
CO RD 1126
CO RD 1104
CO RD 1105
CO RD 1106
CO RD 1102
CO RD 1103
CO RD 1122
CO RD 1123
PVT RD 7214
PVT RD 7205
W ELM ST
S BUFFALO ST
ATHENS ST
WOODLAND DR
TOWER PL
BIG ROCK ST
SHADY CIR
FOREST DR
DEBBIE DR
MILL CREEK RD
SUNSET CIR
LAKE VIEW RD
LONGWOOD RD
WYNNE RD
FIRST MONDAY LN
SCS SITE NO.1 RD
LAKE VIEW RD


EXISTING DISCHARGE POINT #002 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH No. 1
LAT: 32.583488N LONG: 95.845584W
PROPOSED DOWNSTREAM DIVERSION REACH N
LAT: 32.584275N LONG: 95.8
PROPOSED REUSE PUMP STATION AT W
DP#002
CANEY MILL CREEK WWTP PROPERTY BOUNDARY
EXISTING SECURITY FENCE
CITY LIMIT
OLD WASTEWATER TREATMENT FACILITY
18" PIPE OUTFALL 003
SURFACE WATER INTAKE & PROPOSED DIVERSION POINT No. 3
LAT: 32.538956N LONG: 95.853939W
Canton-Hackney Airport
Canton
Hillcrest Cem
Red Hill
Caney Cr
Mill Cr
Mustang Cr
Dry Cr
City Lake
FM 859
I- 20 SRV RD
EDGEWOOD RD
FIRST MONDAY LN
WYNNE RD
CO RD 1130
N TRADE DAYS BLVD
FM 17
CO RD 17
CO RD 4129
W DALLAS ST
E DALLAS ST
CO RD 4131
CO RD 4126
CO RD 4127
FM 1255
CO RD 1654
W ELM ST
ATHENS ST
S BUFFALO ST
LIVE OAK RD
WOODLAND DR
TOWER ST
BIG ROCK ST
SHADY LN
2000

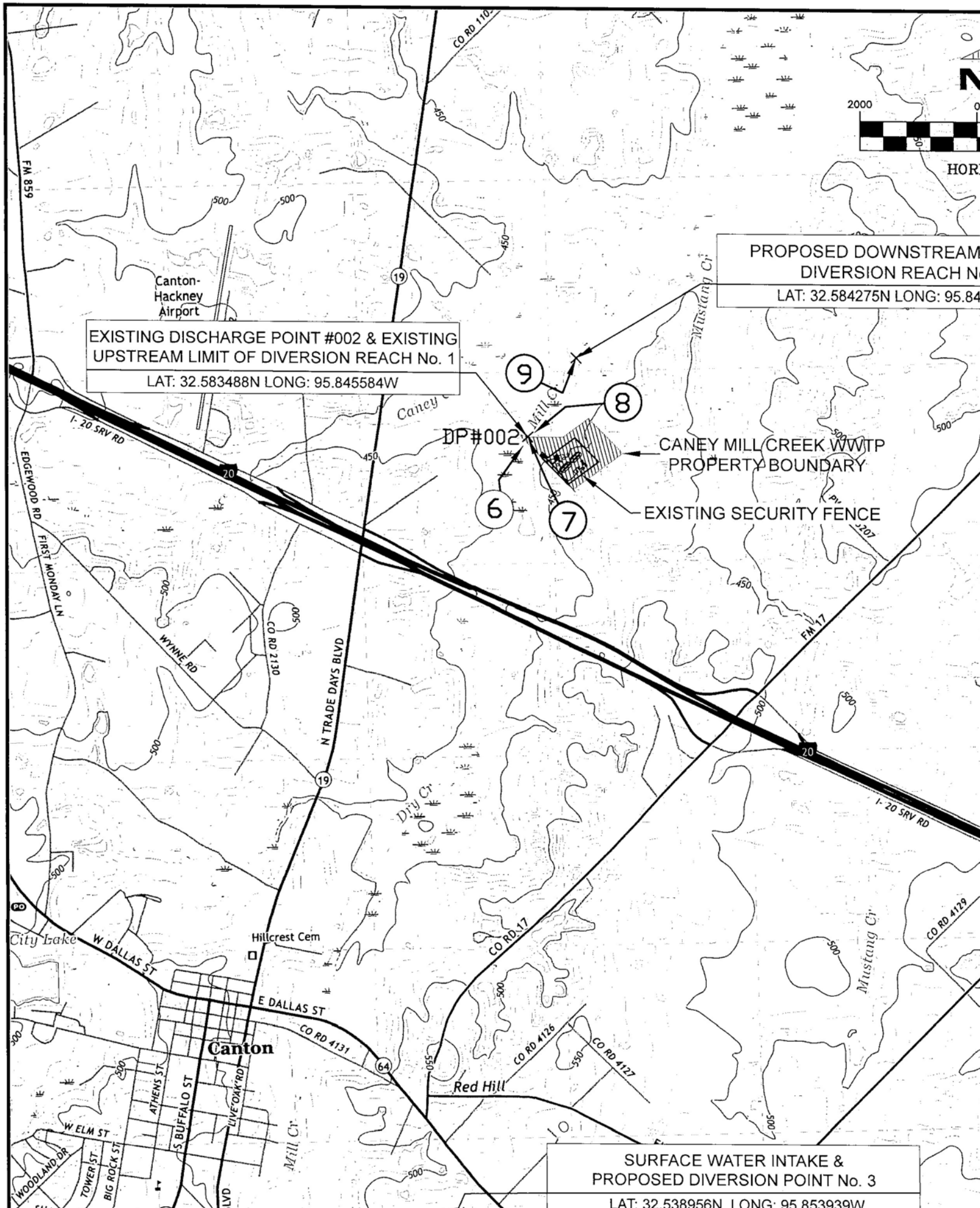

EXISTING DISCHARGE POINT #002 & EXISTING UPSTREAM LIMIT OF DIVERSION REACH No. 1
LAT: 32.583488N LONG: 95.845584W
PROPOSED DOWNSTREAM
DIVERSION REACH N
LAT: 32.584275N LONG: 95.84
DP#002
CANEY MILL CREEK WWTP PROPERTY BOUNDARY
EXISTING SECURITY FENCE
SURFACE WATER INTAKE & PROPOSED DIVERSION POINT No. 3
LAT: 32.538956N LONG: 95.853939W
Canton-Hackney Airport
Canton
Hillcrest Cem
Red Hill
City Lake
Caney Cr
Mill Cr
Mustang Cr
Dry Cr
FM 859
I- 20 SRV RD
EDGEWOOD RD
FIRST MONDAY LN
WYNNE RD
CO RD 2130
N TRADE DAYS BLVD
FM 17
CO RD 1107
CO RD 4131
CO RD 4126
CO RD 4127
CO RD 4129
W DALLAS ST
E DALLAS ST
W ELM ST
ATHENS ST
S BUFFALO ST
LIVE OAK RD
WOODLAND DR
TOWER ST
BIG ROCK ST
2000

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 1a –Lake shore (Intermittent stream mouth on the right) looking West

Photograph No. 1b – Lake shore zoomed in looking West

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 2a – Intermittent stream 200 ft downstream from proposed Outfall of Canton WWTP Discharge Point #003 looking North

Photograph No. 2b – Intermittent stream looking West

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 3a – Proposed Outfall of Canton WWTP Discharge Point #003 looking South

Photograph No. 3b – 100 ft downstream of Intermittent stream from proposed Canton WWTP Discharge Point #003 Outfall looking South

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

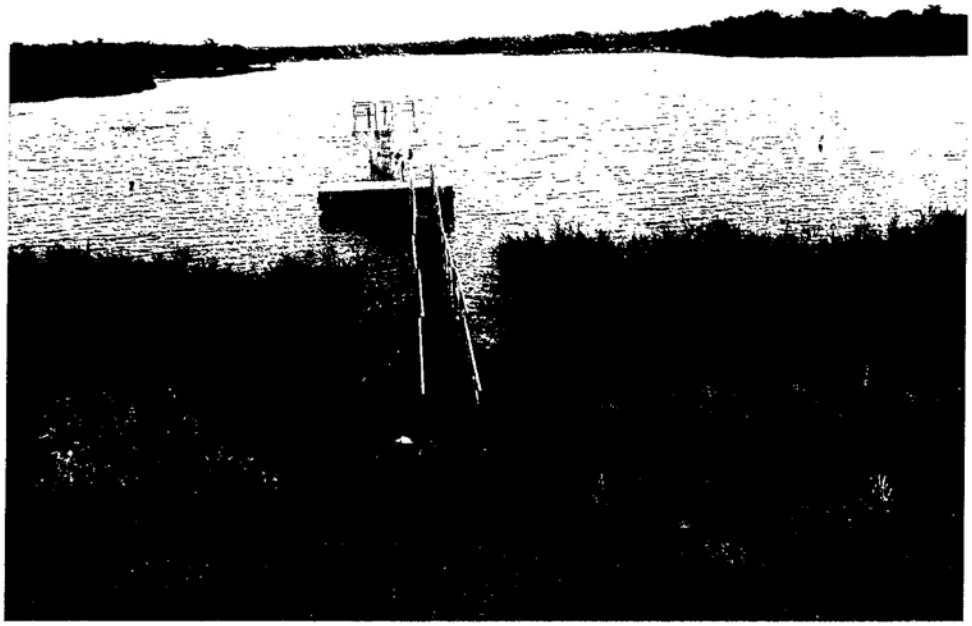
CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 4a – Lake shore (Intermittent Stream mouth on the left) looking East

Photograph No. 4b – Lake shore looking East (zoomed in)

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm
Photograph No. 5– Diversion point No. 3 looking South East



Photograph No. 5a – Diversion point No. 3 looking South East (Dec 2018)

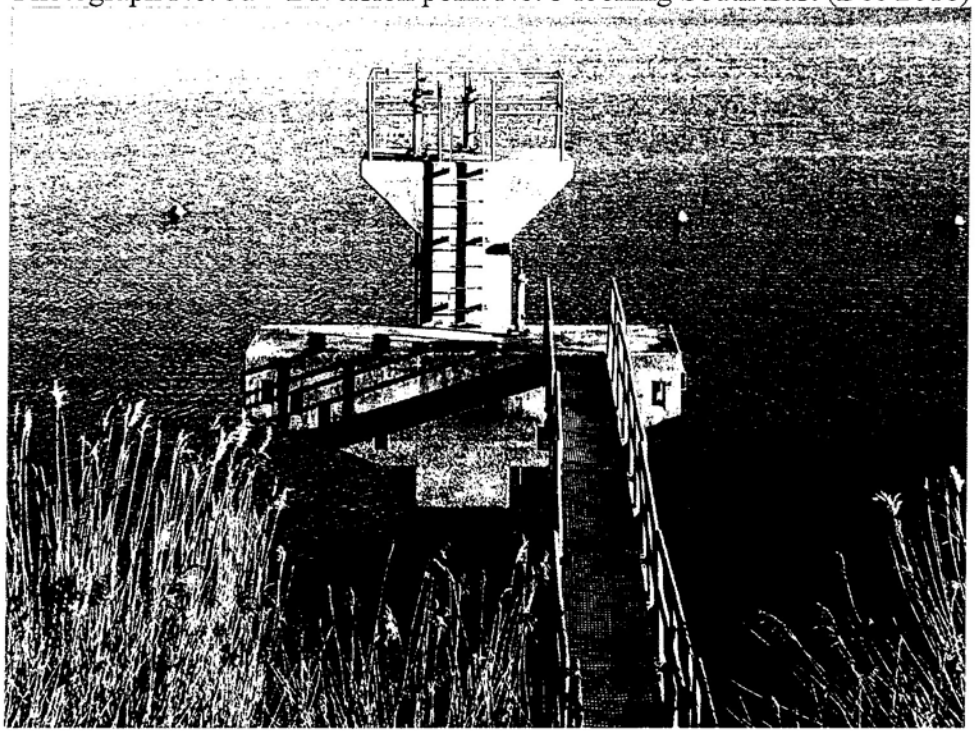
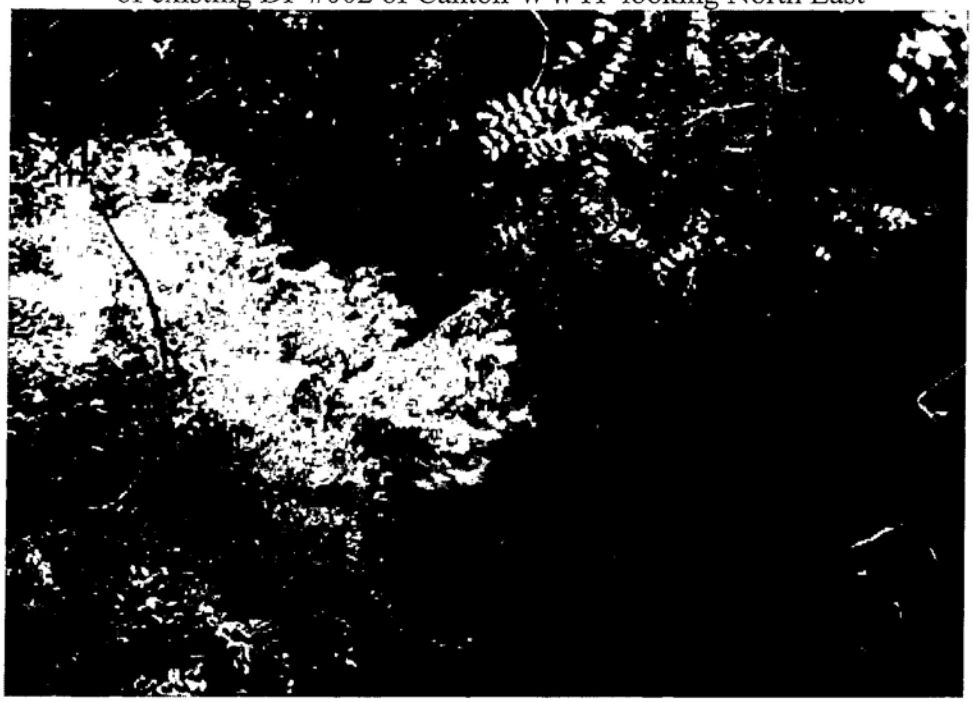


EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 6 – Upstream Limit of Diversion Reach No. 1 & Outfall of existing DP #002 of Canton WWTP looking North East



Photograph No. 7 – Upstream Limit of Diversion Reach No.1 & Outfall of Canton WWTP Discharge Point #002 looking North West

EXHIBIT 4B
ORIGINAL PHOTOGRAPHS

CITY OF CANTON, VAN ZANDT COUNTY, TX
2019 AMENDMENT TO A WATERRIGHT
as of 07/12/2019 at 4 pm

Photograph No. 8 – Upstream Limit of Diversion Reach No.1 & Outfall of Canton WWTP Discharge Point #002 looking South West

Photograph No. 9 – Downstream Limit of Diversion Reach No. 2 located 0.3 miles downstream from the Canton WWTP Discharge Point #002 Outfall looking North

Document No. 2010-008129

GENERAL WARRANTY DEED

Parties: OXFORD KELLY

to

CITY OF CANTON

FILED AND RECORDED
REAL RECORDS

On: 10/07/2010 at 10:45 AM

Document Number: 2010-008129
Receipt No.: 201030638
Amount: $ 28.00

By: esmith
Charlotte Bledsoe, County Clerk
Van Zandt County, Texas

5 Pages

DO NOT REMOVE THIS PAGE – IT IS A PART OF THIS INSTRUMENT

STATE OF TEXAS
COUNTY OF VAN ZANDT

I hereby certify that this instrument was filed on the date and time stamped hereon by me and was duly recorded under the Document Number stamped hereon of the Official Public Records of Van Zandt County.

Charlotte Bledsoe, County Clerk

Record and Return To:

VAN ZANDT COUNTY ABSTRACT

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

General Warranty Deed

Date: October 4, 2010

Grantor: KELLY OXFORD a/k/a KELLY PRIEST OXFORD and husband, PAT OXFORD

Grantor's Mailing Address:

KELLY OXFORD a/k/a KELLY PRIEST OXFORD and PAT OXFORD
P. O. Box 1010
Van, Texas 75790
Van Zandt County

Grantee: CITY OF CANTON

Grantee's Mailing Address:

CITY OF CANTON
P. O. Box 245
Canton, Texas 75103
Van Zandt County

Consideration:

TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

Property (including any improvements):

Being 12.76 acres of land situated in the Q. C. NUGENT SURVEY, Abstract No. 618, Van Zandt County, Texas, and being a part of that certain called 200.0 acre tract (Tract No. 1) described in a Warranty Deed with Vendor's Lien, dated September 23, 1970, from James H. Guess and wife, Joan Guess, to Russell Priest, recorded in Volume 747, page 239, of the Deed Records of Van Zandt County, Texas. Said 12.76 acres of land being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod (set) for corner in the Southwest line of the above referenced 200.0 acre tract (Tract No. 1), in the Southwest line of a 40.0 feet wide easement to the City of Canton, Texas, recorded in Volume 1073, page 260, and Volume 1075, page 324, of the Real Records of Van Zandt County, Texas, and being located North 46 deg. 08 min. 40 sec. West, a distance of 264.98 feet from the calculated South corner of said 200.0 acre tract (Tract No. 1);

THENCE: North 46 deg. 08 min. 40 sec. West, with the Southwest line of said 200.0 acre tract (Tract No. 1) and with the Southwest line of said 40.0 feet wide easement, a distance of 126.25 feet to a 1/2 inch iron rod (set) for corner at the South corner of that certain called 10.00 acre tract described in a Warranty Deed from Russell Priest and wife, Jocele Priest, to City of Canton, Texas, recorded in Volume 1073, page 256, of the Real Records of Van Zandt County, Texas, and at the West corner of said 40.0 feet wide easement;

THENCE: North 51 deg. 55 min. 29 sec. East, with the Southeast line of said 10.00 acre tract, a distance of 660.00 feet to a point for corner in concrete at the East corner of said 10.00 acre tract, from which a 3 inch steel fence corner post (found) and used for reference bears North 87 deg. West, a distance of 0.62 feet;

THENCE: North 46 deg. 08 min. 40 sec. West, with the most Easterly Northeast line of said 10.00 acre tract, a distance of 582.72 feet to a 1/2 inch iron rod (set) for corner at the most Easterly North corner of same;

THENCE: South 51 deg. 55 min. 29 sec. West, with the most Easterly Northwest line of said 10.00 acre tract, a distance of 559.00 feet to a 1/2 inch iron rod (set) for corner at an interior ell corner of same;

THENCE: North 46 deg. 08 min. 40 sec. West, with the most Westerly Northeast line of said 10.00 acre tract, a distance of 474.07 feet to a point for corner at an angle corner in same and being located in Mill Creek, from which a 1/2 inch iron rod (set) for reference bears South 46 deg. 08 min. 40 sec. East, a distance of 18.00 feet;

THENCE: North 88 deg. 36 min. 45 sec. East, at 26.00 feet passing a 1/2 inch iron rod (set) for reference, continuing in all a total distance of 576.41 feet to a 1/2 inch iron rod (set) for corner;

THENCE: North 51 deg. 55 min. 29 sec. East, a distance of 547.58 feet to a 1/2 inch iron (set) for corner;

THENCE: South 46 deg. 08 min. 40 sec. East, a distance of 835.22 feet to a 1/2 inch iron (set) for corner;

THENCE: South 51 deg. 55 min. 29 sec. West, a distance of 1061.98 feet to the place of beginning, and containing 12.76 acres of land, more or less.

Reservations from Conveyance:

None

Exceptions to Conveyance and Warranty:

Validly existing easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded and validly existing instruments, other than conveyances of the surface fee estate, that affect the Property; and taxes for 2010, which Grantee assumes and agrees to pay, and subsequent assessments for that and prior years due to change in land usage, ownership, or both, the payment of which Grantee assumes.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

When the context requires, singular nouns and pronouns include the plural.

Kelly Priest Oxford

KELLY OXFORD a/k/a KELLY PRIEST OXFORD

Pat Oxford

PAT OXFORD

STATE OF TEXAS)

COUNTY OF VAN ZANDT)

This instrument was acknowledged before me on October 7, 2010, by KELLY OXFORD a/k/a KELLY PRIEST OXFORD and PAT OXFORD.

Karen H Hendricks
Notary Public, State of Texas
My commission expires: 5/24/12

KAREN H HENDRICKS
Notary Public
State of Texas
My Comm. Expires 05-24-2012

PREPARED IN THE OFFICE OF:

ANDERSON & ELLIOTT, P.C.
128 E. Dallas Street
Canton, TX 75103
Tel: (903) 567-4141
Fax: (903) 567-6228

AFTER RECORDING RETURN TO:

City of Canton
P. O. Box 245
Canton, Texas 75103

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

THE STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF VAN ZANDT §

KELLY COX and LINDA COX (collectively, "*Grantor*") for and in consideration of the sum of TEN DOLLARS ($10.00) cash, and other good and valuable consideration in hand paid by the Grantee herein named, the receipt and sufficiency of which consideration being hereby fully acknowledged and confessed, has GRANTED, SOLD and CONVEYED, and by these presents does hereby GRANT, SELL and CONVEY unto the CITY OF CANTON, TEXAS ("*Grantee*") all of the real property together with all improvements located thereon described on **Exhibit A** attached hereto and incorporated by this reference herein for all purposes ("*Property*").

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said Grantee and Grantee's successors and assigns forever; and Grantor does hereby bind Grantor and Grantor's successors and assigns to WARRANT AND FOREVER DEFEND all and singular the said Property unto the said Grantee and Grantee's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

Signature Page Follows

Signature Page of Kelly Cox to General Warranty Deed:

EXECUTED this 24th day of March, 2011.

GRANTOR:

Kelly Cox
KELLY COX

THE STATE OF TEXAS §
§
COUNTY OF VAN ZANDT §

Before me, Mary Gilmore on this day personally appeared Kelly Cox, known to me (or proved to me on the oath of _____) or through Social Security # to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 24th day of March 2011.

Mary A. Gilmore
Notary Public, State of Texas
My commission expires: 11-6-2014

Signature Page of Linda Cox to General Warranty Deed:

EXECUTED this 24th day of March, 2011.

GRANTOR:

Linda Cox
LINDA COX

THE STATE OF TEXAS §
§
COUNTY OF VAN ZANDT §

Before me, Mary Gilmore on this day personally appeared Linda Cox, known to me (or proved to me on the oath of _____) or through Social Security to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 24th day of March, 2011.

Mary A. Gilmore
Notary Public, State of Texas
My commission expires: 11-6-2014

EXHIBIT A

LEGAL DESCRIPTION

SSC STANGER SURVEYING CANTON LLC
581 S. TRADE DAYS BLVD.
CANTON, TEXAS 75103
PH: 903-567-3680 FAX: 903-567-6861

EXHIBIT "A-2"

Q. C. NUGENT SURVEY, ABSTRACT NO. 618
VAN ZANDT COUNTY, TEXAS

METES AND BOUNDS DESCRIPTION FOR 0.288 OF AN ACRE OF LAND

BEING a 0.288 of an acre of land situated in the Q. C. Nugent Survey, Abstract No. 618, Van Zandt County, Texas, and being a part of that certain called 300.0 acre tract described in a Warranty Deed, dated March 10, 1993, from Helen Cox and Casey Lee Cox to Kelly Cox, recorded in Volume 1275, Page 861 of the Real Records of Van Zandt County, Texas. Said 0.288 of an acre of land being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod capped "Stanger" (set) for corner in the North right-of-way line of U. S. Interstate Highway No. 20 (a variable width right-of-way), being located South 69 deg. 45 min. 10 sec. East, a distance of 326.72 feet from the intersection of said right-of-way line with the center of Mill Creek, and also being located South 69 deg. 45 min. 10 sec. East, a distance of 938.42 feet from a concrete highway right-of-way monument (found) marking TxDot Engineer's Station 10+00;

THENCE: North 21 deg. 57 min. 31 sec. East, over and across said 300.0 acre tract, a distance of 390.00 feet to a 1/2 inch iron rod capped "Stanger" (set) for corner in the Southeast right-of-way line of an existing 30.0' wide easement (Mill Creek Main) to the City of Canton, Texas (record not found);

THENCE: North 49 deg. 22 min. 29 sec. East, over and across said 300.0 acre tract and with the Southeast right-of-way line of said existing 30.0' wide easement, a distance of 65.15 feet to a 1/2 inch iron rod capped "Stanger" (set) for corner in same;

THENCE: South 21 deg. 57 min. 31 sec. West, over and across said 300.0 acre tract, a distance of 416.94 feet to a 1/2 inch iron rod capped "Stanger" (set) for corner in the North right-of-way line of U. S. Interstate Highway No. 20;

THENCE: North 69 deg. 45 min. 10 sec. West, with the North right-of-way line of U. S. Interstate Highway No. 20, a distance of 30.01 feet back to the PLACE OF BEGINNING and containing 0.288 of an acre of land.

I, Mark D. Bryant, Sr., Registered Professional Land Surveyor, do hereby certify that the above description was prepared from an actual survey made on the ground under my direction and supervision during the month of November, 2009.

Bearings are "GRID" and based on the Texas State Plane Coordinate System, North Central Zone (NAD 83) as derived from G.P.S. observations. Mapping Angle = + 01°26'48".

Reference made to Exhibit "A-1" attached hereto.

GIVEN UNDER MY HAND AND SEAL, this the 10th day of November, 2009.

Mark D. Bryant, Sr.,
Registered Professional Land Surveyor
State of Texas No. 4360

STATE OF TEXAS
REGISTERED
MARK D. BRYANT, SR.
4360
PROFESSIONAL
LAND SURVEYOR

Job No.: C09211

Survey Completed: 11-10-2009

After recording, please return to:
Lloyd, Gosselink, Rochelle & Townsend, P.C.
ATTN: Cathleen C. Slack
816 Congress Avenue, Suite 1900
Austin, Texas 78701

Prepared by the State Bar of Texas for use by lawyers only. Reviewed 1-1-76. Revised to include grantee's address (art. 6626, RCS) 1-1-82.

VOL 1073 PAGE 256

10,081

WARRANTY DEED
(LONG FORM)

THE STATE OF TEXAS
COUNTY OF VAN ZANDT } KNOW ALL MEN BY THESE PRESENTS:

That I, Russell Priest and wife, Jocele Priest

of the County of Van Zandt and State of Texas for and in consideration of the sum of Ten and no/100----------
----------($10.00)-----DOLLARS
and other valuable consideration to the undersigned paid by the grantee herein named, the receipt of which is hereby acknowledged,

have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto

CITY OF CANTON, TEXAS
PO Box 254

of the County of Van Zandt and State of Texas, all of the following described real property in Van Zandt County, Texas, to-wit:

BEING:

10.00 acres out of a tract owned by Russell Priest, said tract described as 200.00 acres as recorded in Volume 747, Page 239 of the Van Zandt County Deed Records situated in the Q. C. Nugent Survey, Abstract No. 618 and described by metes and bounds as follows:

Beginning at a 1/2 inch iron rod set in fence along most Westerly Southwest line of said 200.00 acres tract and 755.5 feet North 45 degrees 40 minutes West from the South corner of said 200.00 acres tract;

Thence with the general line of fence North 45 degrees 40 minutes West 1204.91 feet to a corner in the centerline of Mill Creek whence bears a 14 inch Elm South 45 degrees 40 minutes East 26 feet;

Thence with the centerline of Mill Creek South 77 degrees 18 minutes 30 seconds East 190.64 feet to corner in same;

Thence South 45 degrees 40 minutes East 474.07 feet to a 1/2 inch iron rod set for corner;

Thence North 52 degrees 24 minutes 09 seconds East 559.0 feet to a 1/2 inch iron rod set for corner;

Thence South 45 degrees 40 minutes East 582.72 feet to a 1/2 inch iron rod set for corner;

Thence South 52 degrees 24 minutes 09 seconds West 660.00 feet to the place of beginning, containing 10.00 acres of land, more or less.

R.P. THIS CONVEYANCE IS MADE FOR THE INSTALLATION OF A WASTEWATER TREATMENT PLANT. SHOULD PROPERTY NOT BE USED FOR THAT PURPOSE FOR A PERIOD OF ONE YEAR, THAT WILL CONSTITUTE ABANDONMENT AND SHOULD SUCH ABANDONMENT OCCUR BY THE CITY OF CANTON, TEXAS, THE PROPERTY CONVEYED HEREIN SHALL REVERT IMMEDIATELY TO RUSSELL PRIEST, GRANTOR HEREIN.

There is reserved by the grantors herein, all the oil, gas and other minerals, in, under and upon the above described land, together with the right of ingress and egress, which reservation does not include any coal, lignite, iron ore or other hard minerals.

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TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging, unto the said grantee , its heirs and assigns forever; and I do hereby bind myself, my heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee , its heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

EXECUTED this 8th day of November , A. D. 1985

Russell Priest
Russell Priest

Jocele Priest
Jocele Priest

Mailing address of each grantee:

Name: City of Canton
Address: Canton, Texas 75103

Name:
Address:

(Acknowledgment)

STATE OF TEXAS
COUNTY OF Van Zandt }

This instrument was acknowledged before me on the 8th day of November 19 85 .

(Acknowledgment)

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STATE OF TEXAS }
COUNTY OF VAN ZANDT }

This instrument was acknowledged before me on the 12th day of November, 19 85,
by Jodell Priest

Sandra D Cox
Notary Public, State of Texas
Notary's name (printed):

Notary's commission expires:

SANDRA D. COX
Notary Public, State of Texas
My Commission Expires July 31, 1989

(Acknowledgment)

STATE OF TEXAS }
COUNTY OF }

This instrument was acknowledged before me on the day of , 19 ,
by

Notary Public, State of Texas
Notary's name (printed):

Notary's commission expires:

(Corporate Acknowledgment)

STATE OF TEXAS }
COUNTY OF }

This instrument was acknowledged before me on the day of , 19 ,
by
of
a corporation, on behalf of said corporation.

Notary Public, State of Texas
Notary's name (printed):

Notary's commission expires:

AFTER RECORDING RETURN TO:

BILLY D. HULLUM P.C.
Attorney at Law
P.O. Box 60 - 120 S. Fourth St.
Wills Point, TX 75169

City of Carton
Po Box 254
Carton

PREPARED IN THE LAW OFFICE OF:

BILLY D. HULLUM P.C.
Attorney at Law
P.O. Box 60 - 120 S. Fourth St.
Wills Point, TX 75169

FILED FOR RECORD
'85 NOV 12 PM
ELIZABETH EVERETT
CLERK, VAN ZANDT CO.
#10,081

TPDES PERMIT NO.
WQ0010399002
[For TCEQ office use only - EPA I.D. No. TX0099112]

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

This is a renewal that replaces TPDES Permit No. WQ0010399002 issued on May 7, 2015.

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

City of Canton

whose mailing address is

201 North Buffalo Street
Canton, Texas 75103

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

located at 17302 Farm-to-Market Road 17, Canton, in Van Zandt County, Texas 75103

to Mill Creek; thence to Sabine River Below Lake Tawakoni in Segment No. 0506 of the Sabine River Basin

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

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

ISSUED DATE: June 25, 2018

Stephanie Bergeron Perdue
For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 1.3 million gallons per day (MGD), nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,708 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (108)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (163)	25	40	60	Two/week	Composite
Ammonia Nitrogen	3 (33)	6	10	15	Two/week	Composite
E. coli, colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	Daily	Grab

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.

7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

1. Flow Measurements

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

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

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

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

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

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

2. Concentration Measurements

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

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

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

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

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

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

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

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

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

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

3. Sample Type

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

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

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

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

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

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

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

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

2. Test Procedures

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

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

3. Records of Results

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

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period

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

c. Records of monitoring activities shall include the following:

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

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

iii. date and time of analysis;

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

v. the technique or method of analysis; and

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

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

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

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

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

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

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

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

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

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

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

9. Changes in Discharges of Toxic Substances

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

   a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D,

Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

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

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

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

iv. The level established by the TCEQ.

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

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

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

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

iv. The level established by the TCEQ.

10. Signatories to Reports

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

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

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

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

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

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

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

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit

application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

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

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

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

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

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

2. Compliance

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

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

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

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

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

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

g. There shall be no unauthorized discharge of wastewater or any other waste. For the

purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

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

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

3. Inspections and Entry

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

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

4. Permit Amendment and/or Renewal

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

i. The alteration or addition to a permitted facility may meet one of the criteria for

determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

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

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

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

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

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

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

f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of

facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

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

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy

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

i. the permittee;

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

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

b. This notification must indicate:

i. the name of the permittee and the permit number(s);
ii. the bankruptcy court in which the petition for bankruptcy was filed; and
iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

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

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

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

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

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

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

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

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

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not

confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

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

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

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 169) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

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

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

related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

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

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

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

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

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

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

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

    e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

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

        i. Volume of waste and date(s) generated from treatment process;
        ii. Volume of waste disposed of on-site or shipped off-site;

iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

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

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

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SLUDGE PROVISIONS

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

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

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

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

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

B. Testing Requirements

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 5) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 5) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

TABLE 1

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

* Dry weight basis

3. Pathogen Control

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

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

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

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

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

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

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

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

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

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

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

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

d. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

In addition, the following site restrictions must be met if Class B sludge is land applied:

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

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

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

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

v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

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

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

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

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

4. Vector Attraction Reduction Requirements

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

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

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

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

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

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

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

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

defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

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

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

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

Alternative 10-

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

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

C. Monitoring Requirements

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

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

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

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

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

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

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

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

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

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

A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

B. Pathogen Control

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

C. Management Practices

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

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

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

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

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

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

D. Notification Requirements

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

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

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

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

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

E. Record keeping Requirements

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

the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

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

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

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

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

5. The following certification statement:

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

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

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

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

   c. The number of acres in each site on which bulk sludge is applied.

   d. The date and time sludge is applied to each site.

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

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

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

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

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

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

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

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge in mg/kg.

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

8. Date(s) of transport.

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

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

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

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

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

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

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

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

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

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

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

    b. The number of acres in each site on which bulk sewage sludge is applied.

    c. The date and time bulk sewage sludge is applied to each site.

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

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

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

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

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

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

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

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

   Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 5) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 5) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

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

F. Record keeping Requirements

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

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

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

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

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge production in dry tons/year.

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

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

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

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

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

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

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

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

A. General Requirements

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

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

B. Record Keeping Requirements

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

   a. the amount of sludge transported;

   b. the date of transport;

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

   d. the location of the receiving facility or facilities;

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

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

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

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

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. the annual sludge production;
3. the amount of sludge transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

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OTHER REQUIREMENTS

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

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

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

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

4. The permittee is operating under a Restrictive Covenant Agreement that prohibits residential structures within the part of the buffer zone not owned by the permittee according to the requirements of 30 TAC Section 309.13(e)(3). The agreement was issued and has been in effect since 1993. In addition, the permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). See Attachment.

5. A certified operator shall inspect the facility daily and maintain a record of these inspections at the plant site. These records shall be available at the plant site for inspection by authorized TCEQ representatives for at least three years.

6. Wastewater generated from restaurant kitchens shall be routed through a grease trap. Grease traps shall be sized to provide adequate detention time at peak loads to allow the wastewater to cool down and the grease to separate. Grease traps should be cleaned at least twice per month. If grease from restaurants starts appearing at the treatment plant, grease traps shall be cleaned out at a higher frequency. Records shall be maintained of all grease removed from the grease traps. The records will include the following information:

   a. Volume of grease removed and disposed from each restaurant grease trap
   b. Date of disposal
   c. Location of disposal site
   d. Total volume of grease removed from restaurant grease traps

   The above records shall be maintained on monthly basis and be available for inspection by authorized TCEQ representatives for at least three years.

7. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting

Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, daily may be reduced to 5/week. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

8. The facility has an EPA and TCEQ approved water effects ratio (WER) for Total Copper of 7.71 as listed as part of 30 TAC Chapter 307 Rule Project No. 2012-001-307-OW.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIOMONITORING REQUIREMENTS

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

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

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

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

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

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

   c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

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

   e. Testing Frequency Reduction

      1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing

and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

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

2. Required Toxicity Testing Conditions

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

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

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

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

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

5) a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;

6) a percent minimum significant difference of 47 or less for water flea reproduction; and

7) a percent minimum significant difference of 30 or less for fathead minnow growth.

b. Statistical Interpretation

1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in in Part 1.b.

2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b..

3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

5) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control (0% effluent).

6) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.

7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.

8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:

a) substitute a synthetic dilution water that has a pH, hardness, and

alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or

b) use the closest downstream perennial water unaffected by the discharge.

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

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

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

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

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

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

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

4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate

days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

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

3. Reporting

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

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

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

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

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

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For the water flea, Parameter TOP3B, report the NOEC for survival.

3) For the water flea, Parameter TXP3B, report the LOEC for survival.

4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "0."

5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.

6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.

7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.

9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.

10) For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.

12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction in the control.

a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

d. If the two retests are performed due to a demonstration of significant

sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall

conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.

h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times Composites Collected

Date Time Date Time

No. 1 FROM: _____ TO: _____

No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

REP	Percent effluent					
	0%	32%	42%	56%	75%	100%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Survival Mean						
Total Mean						
CV%*						
PMSD						

*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean number of young produced per adult significantly less than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

   CRITICAL DILUTION (100%): _____ YES _____ NO

PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	32%	42%	56%	75%	100%
24h						
48h						
End of Test						

2. Fisher's Exact Test:

   Is the mean survival at test end significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (100%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC reproduction = _____% effluent

   d.) LOEC reproduction = _____% effluent

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

		Date Time		Date Time
Dates and Times Composites Collected	No. 1 FROM:	_____	TO:	_____
	No. 2 FROM:	_____	TO:	_____
	No. 3 FROM:	_____	TO:	_____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

FATHEAD MINNOW GROWTH DATA

Effluent Concentration	Average Dry Weight in replicate chambers					Mean Dry Weight	CV%*
	A	B	C	D	E		
0%							
32%							
42%							
56%							
75%							
100%							
PMSD							

* Coefficient of Variation = standard deviation x 100/mean

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to significant nonlethal effects?

   CRITICAL DILUTION (100%): _____ YES _____ NO

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers					Mean percent survival			CV%*
	A	B	C	D	E	24h	48h	7 day	
0%									
32%									
42%									
56%									
75%									
100%									

* Coefficient of Variation = standard deviation x 100/mean

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

   Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

   CRITICAL DILUTION (100%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, and then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in item 2.b., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

d. This permit may be amended to require a WET limit, a Best Management Practice (BMP), Chemical-Specific (CS) limits, or other appropriate actions to address toxicity. The permittee may be required to conduct a Toxicity Reduction Evaluation after multiple toxic events.

e. As the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this Section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in item a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency defined in item b.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

b. Dilution Water - In accordance with item 1.c., the control and dilution water shall normally consist of standard, synthetic, moderately hard, reconstituted water. If the permittee utilizes the results of a chronic test to satisfy the requirements in item 1.e., the permittee may use the receiving water or dilution water that meets the requirements of item 2.a as the control and dilution water.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 001.

2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

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

3. Reporting

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

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

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

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.

b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, the permittee

shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the

progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

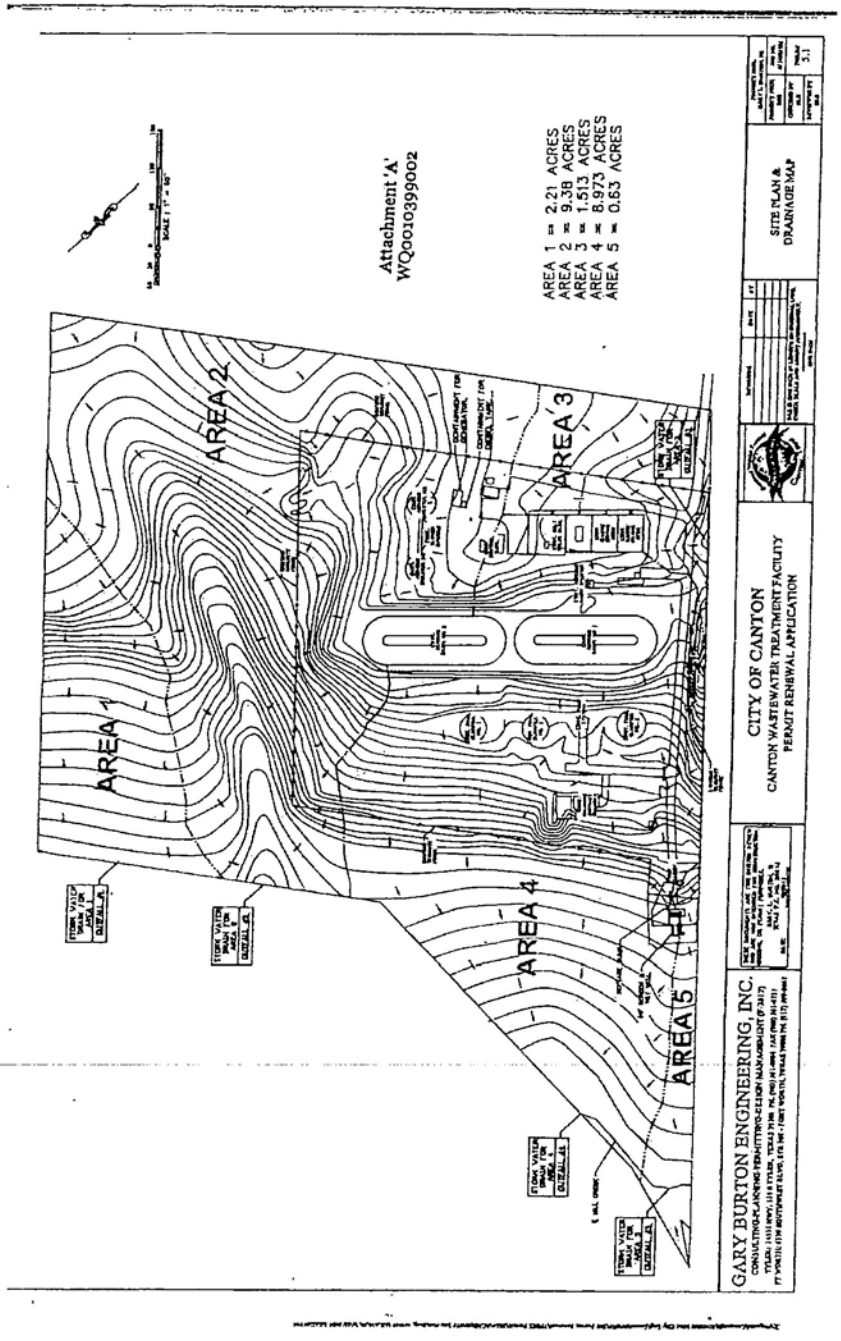
	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent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WQ0010399002
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AREA 2 = 9.38 ACRES
AREA 3 = 1.513 ACRES
AREA 4 = 8.973 ACRES
AREA 5 = 0.63 ACRES
AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
CITY OF CANTON
CANTON WASTEWATER TREATMENT FACILITY
PERMIT RENEWAL APPLICATION
SITE PLAN & DRAINAGE MAP
GARY BURTON ENGINEERING, INC.

NOV 2 0 2019

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0010399002

APPLICATION. City of Canton, 201 North Buffalo Street, Canton, Texas 75103, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010399002 (EPA I.D. No. TX0099112) to authorize additional outfall. The domestic wastewater treatment facility is located at 1098 Private Road 5207, Canton, in Van Zandt County, Texas 75103. The discharge route is from the plant site to Mill Creek; thence to Sabine River Below Lake Tawakoni via Outfall 002 and via pipe to the Soil Conservation Service Reservoir via Outfall 003. TCEQ received this application on September 16, 2019. The permit application is available for viewing and copying at Canton City Hall, 201 North Buffalo Street, Canton, Texas. 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://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd36of8168250f&marker=-95.843333%2C32.581944&level=12

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.**

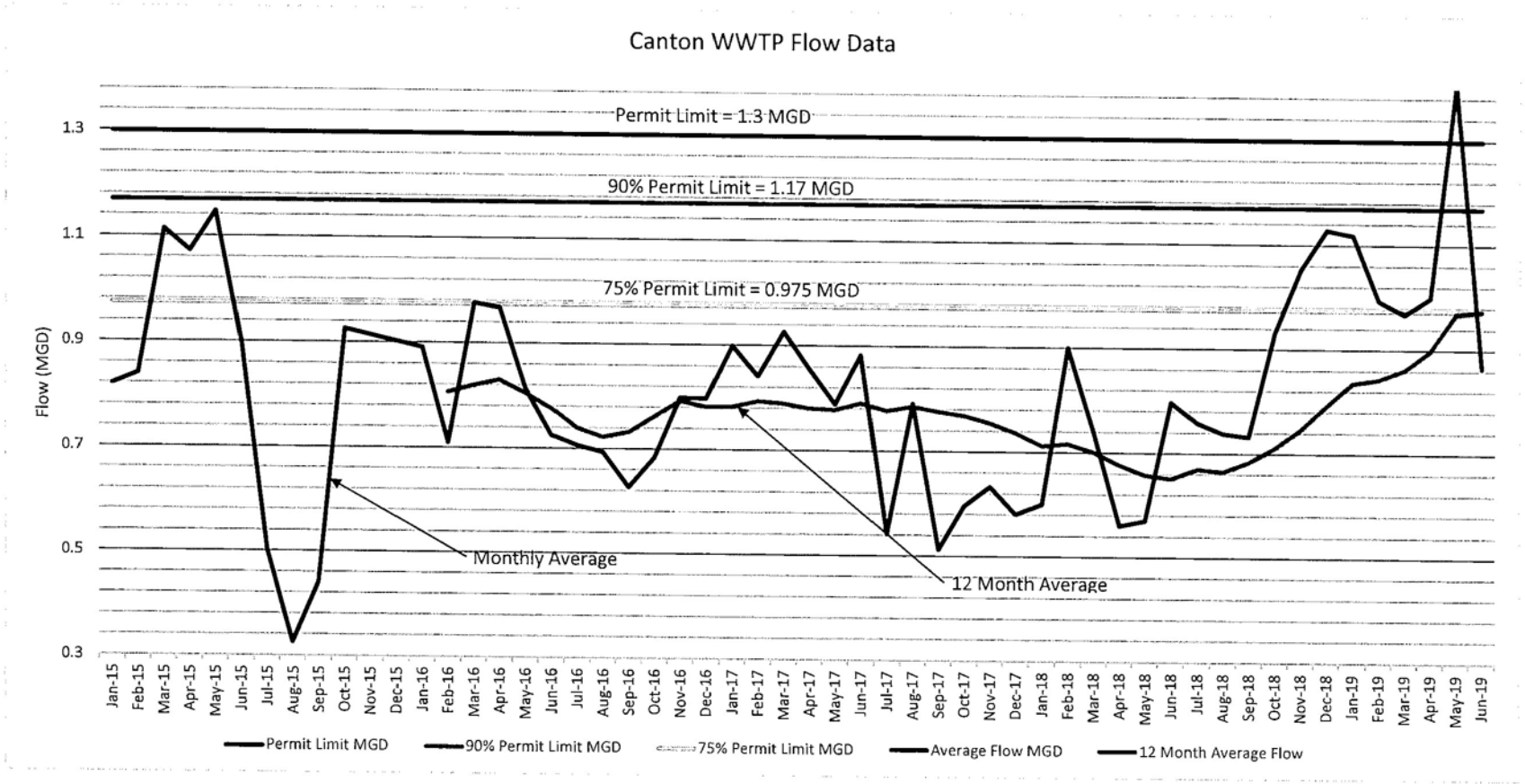
PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines 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**

Further information may also be obtained from City of Canton at the address stated above or by calling Mr. Rick Malone, Superintendent, at 903-567-2826.

Issuance Date: November 7, 2019

CITY OF CANTON
WWTP DISCHARGE RATES
2015-2019



CITY OF CANTON
WWTP DISCHARGE RATES
2015-2019

Date	Total Flow	Total Flow	Days/Month	Average Flow	Permit Limit	90% Permit Limit	75% Permit Limit	12 Month Average Flow
	gal	MG		MGD	MGD	MGD	MGD	MGD
Jan-15	25372000	25.372	31	0.818	1.3	1.17	0.975	
Feb-15	23494000	23.494	28	0.839	1.3	1.17	0.975	
Mar-15	34515000	34.515	31	1.113	1.3	1.17	0.975	
Apr-15	32146000	32.146	30	1.072	1.3	1.17	0.975	
May-15	35562000	35.562	31	1.147	1.3	1.17	0.975	
Jun-15	26948000	26.948	30	0.898	1.3	1.17	0.975	
Jul-15	15589000	15.589	31	0.503	1.3	1.17	0.975	
Aug-15	10072000	10.072	31	0.325	1.3	1.17	0.975	
Sep-15	13206000	13.206	30	0.440	1.3	1.17	0.975	
Oct-15	28685000	28.685	31	0.925	1.3	1.17	0.975	
Jan-16	27602000	27.602	31	0.890	1.3	1.17	0.975	
Feb-16	20560000	20.56	29	0.709	1.3	1.17	0.975	0.807
Mar-16	30245000	30.245	31	0.976	1.3	1.17	0.975	0.820
Apr-16	29005000	29.005	30	0.967	1.3	1.17	0.975	0.830
May-16	25226000	25.226	31	0.814	1.3	1.17	0.975	0.805
Jun-16	21761000	21.761	30	0.725	1.3	1.17	0.975	0.777
Jul-16	21877000	21.877	31	0.706	1.3	1.17	0.975	0.740
Aug-16	21487000	21.487	31	0.693	1.3	1.17	0.975	0.723
Sep-16	18799000	18.799	30	0.627	1.3	1.17	0.975	0.733
Oct-16	21187000	21.187	31	0.683	1.3	1.17	0.975	0.763
Nov-16	23958000	23.958	30	0.799	1.3	1.17	0.975	0.793
Dec-16	24731000	24.731	31	0.798	1.3	1.17	0.975	0.782
Jan-17	27849000	27.849	31	0.898	1.3	1.17	0.975	0.783
Feb-17	23533000	23.533	28	0.840	1.3	1.17	0.975	0.794
Mar-17	28711000	28.711	31	0.926	1.3	1.17	0.975	0.790
Apr-17	25668000	25.668	30	0.856	1.3	1.17	0.975	0.780
May-17	24458000	24.458	31	0.789	1.3	1.17	0.975	0.778
Jun-17	26469000	26.469	30	0.882	1.3	1.17	0.975	0.791
Jul-17	16783000	16.783	31	0.541	1.3	1.17	0.975	0.778
Aug-17	24512000	24.512	31	0.791	1.3	1.17	0.975	0.786
Sep-17	15356000	15.356	30	0.512	1.3	1.17	0.975	0.776
Oct-17	18479000	18.479	31	0.596	1.3	1.17	0.975	0.769
Nov-17	19005000	19.005	30	0.634	1.3	1.17	0.975	0.755
Dec-17	17987000	17.987	31	0.580	1.3	1.17	0.975	0.737
Jan-18	18612000	18.612	31	0.600	1.3	1.17	0.975	0.712
Feb-18	25195000	25.195	28	0.900	1.3	1.17	0.975	0.717
Mar-18	22929000	22.929	31	0.740	1.3	1.17	0.975	0.702
Apr-18	16800000	16.8	30	0.560	1.3	1.17	0.975	0.677
May-18	17670000	17.67	31	0.570	1.3	1.17	0.975	0.659
Jun-18	23921000	23.921	30	0.797	1.3	1.17	0.975	0.652
Jul-18	23500100	23.5001	31	0.758	1.3	1.17	0.975	0.670
Aug-18	22875000	22.875	31	0.738	1.3	1.17	0.975	0.665
Sep-18	21947000	21.947	30	0.732	1.3	1.17	0.975	0.684
Oct-18	28854000	28.854	31	0.931	1.3	1.17	0.975	0.712
Nov-18	31573000	31.573	30	1.052	1.3	1.17	0.975	0.747
Dec-18	34978000	34.978	31	1.128	1.3	1.17	0.975	0.792
Jan-19	34665000	34.665	31	1.118	1.3	1.17	0.975	0.835
Feb-19	27815000	27.815	28	0.993	1.3	1.17	0.975	0.843
Mar-19	29998000	29.998	31	0.968	1.3	1.17	0.975	0.862
Apr-19	29999000	29.999	30	1.000	1.3	1.17	0.975	0.899
May-19	43600000	43.6	31	1.406	1.3	1.17	0.975	0.969
Jun-19	25951000	25.951	30	0.865	1.3	1.17	0.975	0.974

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 23, 2007

~~Jason S. Brown~~
Gary Burton Engineering, Inc.
14531 State Hwy 155 S
Tyler, TX 75703

Re: Administrative Review
The City of Canton 2006 Water Conservation Plan

Dear Mr. Brown:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the above referenced water conservation plan. The plan, required by TCEQ rules in Title 30 Texas Administrative Code (TAC) Chapter 288, was received on May 19, 2000, and additional information on August 14, 2006.

Title 30 TAC Chapter 288.30(1) states:

> **The holder of an existing permit, certified filing, or certificate of adjudication for the appropriation of surface water in the amount of 1,000 acre-feet a year or more for municipal, industrial and other non-irrigation uses shall develop, submit and implement a water conservation plan meeting the requirements of Subchapter A of this Chapter.**
>
> TCEQ records indicate that the City of Canton holds a water right of 1,000 acre-feet a year or more for municipal purposes.

The submitted plan meets the minimum requirements for municipal use as defined in the TCEQ Rules, Title 30 TAC Chapter 288, and the plan is declared administratively complete.

Please be advised that in accordance with Title 30 TAC Chapter 288, the next revision of the water conservation plan shall be updated, adopted, and submitted to TCEQ no later than May 1, 2009. Additionally, any future revised water conservation plans shall be submitted to TCEQ within 90 days of adoption.

Re: **Administrative Review**
City of Canton 2006 Water Conservation Plan

Should you have any questions, the Resource Protection Team can be reached at (512) 239-4691.

Sincerely,

Ethan Ham, Water Conservation Specialist
Resource Protection Team
Water Supply Division

CC: Lonnie Cluck, Director of Operations
City of Canton

II. WATER USE DATA FOR SERVICE AREA

A. *Water Accounting Data*

1. List the amount of water use for the previous five years (in 1,000 gallons). Indicate whether this is ☐ diverted or ☒ treated water.

Year	2014	2015	2016	2017	2018
Month					
January	17,800	21,470	26,030	18,610	19,734
February	15,810	19,850	24,220	16,430	16,900
March	18,220	21,810	29,060	20,910	21,690
April	20,860	24,120	27,780	21,191	21,760
May	23,070	23,940	22,550	21,434	27,600
June	21,940	27,180	26,830	23,230	32,340
July	25,220	37,940	39,330	25,360	28,270
August	28,910	39,360	36,110	24,330	27,070
September	26,800	35,430	28,200	27,550	22,340
October	25,660	33,280	26,540	24,500	16,710
November	21,650	26,010	21,760	20,980	27,450
December	19,940	26,930	31,320	19,140	21,830
Totals	265,880	337,230	339,730	263,665	283,694

Describe how the above figures were determine (e.g, from a master meter located at the point of a diversion from the source, or located at a point where raw water enters the treatment plant, or from water sales).
The above figures are from the daily master meter readings located at the surface water treatment plant and at the water well locations, tabulated in the TWDB Water Use Survey.

2. Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

Year	2014	2015	2016	2017	2018
Account Types					
Residential	98,715	111,896	128,745	132,872	108,750
Single-Family	90,181	104,306	113,946	119,040	94,452
Multi-Family	8,534	7,590	14,799	16,832	14,298
Commercial	90,905	94,331	91,971	98,197	92,490
Industrial/Mining	0	0	0	0	0
Institutional	0	0	0	0	0
Agriculture	0	0	0	0	0
Other/Wholesale	0	0	0	0	0

3. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

Year	*Amount (gallons)*	*Percent %*
2014	2,904,000	1
2015	49,496,000	15
2016	39,014,000	11
2017	2,596,000	1
2018	2,454,000	1

B. Projected Water Demands

If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	*Source*	*Amount Authorized*
Surface Water	Mill Creek Lake & Old City Lake	1,550 acre-feet
Groundwater	Water Well 4, 5, 6	180, 365, 176 gpm
Contracts	N/A	
Other	N/A	

B. Treatment and Distribution System

1. Design daily capacity of system (MGD): 2.59 MGD

2. Storage capacity (MGD):
   a. Elevated .75 MG
   b. Ground 1.20 MGD

3. If surface water, do you recycle filter backwash to the head of the plant?
   ☐ Yes ☒ No If yes, approximate amount (MGD):

CITY OF CANTON

Reuse Permit Accounting Plan for Wastewater Discharges and Diversions Van Zandt County, Texas For Amendment of Certificate of Adjudication #05-4675A

Issue Date: August 2019

Prepared By:

CAPCO ENGINEERING INC.

TBPE FIRM NO.: F-4347

13044 County Road 192 – Tyler TX 75703 • Ph 903-531-9671. • Fax 903-531-9675

TABLE OF CONTENTS

I. INTRODUCTION

The City of Canton (the "City") is authorized to store, divert and use surface water in Mill Creek Lake and to use the bed and banks of Mill Creek to divert return flows and discharge to an undisclosed location pursuant to Certificate of Adjudication ("CA") No. 05-4675A. The City also uses groundwater. The City is seeking to amend its indirect reuse permit in a way which will allow the City to:

- Divert and reuse existing and future City return flows within the City's service area
- Use the bed and banks of Mill Creek to transport return flows to the diversion points for reuse
- Divert return flows subject to the following limitations:
  1. Diversions of return flows shall be limited to times when streamflow exceeds the following environmental flow values as measured at a monitoring device to be installed immediately downstream of the diversion point.

Season	Environmental (Bypass) Base Flow
Winter (January-March)	6 cfs
Spring (April-June)	3 cfs
Summer (July-September)	1 cfs
Fall (October-December)	1 cfs

  2. If the streamflow measured at the monitoring device is greater than the applicable base flow value, then the Owner may divert return flows up to the authorized amounts, as long as the flow at the device does not fall below the applicable base flow value.
  3. The streamflow at the monitoring device shall be noted and recorded between 9 AM and 10 AM on the day of an anticipated diversion and daily at the same time for the duration of all diversions. Gage flow readings in the stream shall be taken on the same day as the diversions to which they apply.
  4. In the event of a leap year, a blank row is present in each table pertaining to the month of February to accept an entry for February 29th.
- Transport existing and future City return flows through a pipeline and discharge to an alternate outfall 002 into an unnamed tributary of Mill Creek Lake

II. ELEMENTS OF THE ACCOUNTING PLAN

The Accounting Plan is in the form of an Excel workbook spreadsheet with five (5) tabs/worksheets. It includes the following elements:

Comments – includes comments as to who developed the plan, shaded vs. unshaded cell explanations, and revision dates.

Constants – includes Descriptions, Names, and Values of constants and conversion factors used throughout the plan that are also referenced in some of the table formulae. It also includes the table of instream environmental base flow requirements.

Table 1a – includes basic data in mgd on the municipal water supply sources used by the City of Canton on a daily basis and computations of the percentage of total use for municipal water supply by source.

Table 1b – shows basic municipal water supply use data by source in acre-feet.

Table 2a – summarizes wastewater discharges from the City of Canton's Outfall No. 1 by the source of the water that created the discharge.

Table 2b – summarizes wastewater discharges from the City of Canton's Outfall No. 2 by the source of the water that created the discharge.

Table 4 – shows the allowable downstream diversion for reuse (assuming that streamflow conditions are met) and the amount actually diverted for discharges from Outfall No. 1.

These tables are discussed individually in the following sections of the plan.

TABLE 1a – MUNICIPAL WATER SUPPLY SOURCE DATA IN MILLION GALLONS

This table gives the sources of municipal water supply used by the City of Canton. The columns in the table are developed as follows:

(1a.1) Date. This is the date to which the data apply.

(1a.2) Municipal Water Supply by Source – Mill Creek Lake **Without** Return Flows. This is the amount of water diverted to the water treatment plant from Mill Creek Lake in million gallons, as measured by a flow meter at the plant.

(1a.3) Municipal Water Supply by Source – Groundwater. This is the amount of water pumped to the water distribution system from groundwater in million gallons, as measured by flow meters at the three operating water wells.

(1a.4) Municipal Water Supply by Source – Mill Creek Lake **With** Return Flows. This is the amount of water diverted to the water treatment plant from Mill Creek Lake in million gallons. It is the sum of Columns (1a.2) and (1a.5).

(1a.5) Return Flows. This is the amount of water discharged to Mill Creek Lake in million gallons, as measured by a flow meter at the Return Flow Pump Station at the wastewater treatment plant.

(1a.6) Municipal Water Supply by Source – Total Municipal Supply. This is the total amount of water diverted for municipal water supply. It is the sum of Columns (1a.3) and (1a.4).

(1a.7) Percentage of Use by Original Source – Mill Creek Lake. This is the percentage of the municipal water supply that comes from Mill Creek Lake. It is computed by dividing column (1a.2) by (1a.6) expressed as a percentage.

(1a.8) Percentage of Use by Original Source – Groundwater. This is the percentage of the municipal water supply that comes from groundwater. It is computed by dividing column (1a.3) by (1a.6) expressed as a percentage.

TABLE 1b – MUNICIPAL WATER SUPPLY SOURCE DATA IN ACRE FEET

This table gives the sources of municipal water supply used by the City of Canton with values expressed in acre-feet rather than million gallons. The columns in the table are developed as follows:

(1b.1) Date. This is the date to which the data apply.

(1b.2) Municipal Water Supply by Source – Mill Creek Lake **Without** Return Flows. This is the amount of water diverted to the water treatment plant from Mill Creek Lake in acre-feet. It is determined by converting Column (1a.2) from million gallons to acre-feet using the conversion factor found in the Constants table.

(1b.3) Municipal Water Supply by Source – Groundwater. This is the amount of water pumped to the water distribution system from groundwater in acre-feet. It is determined by converting Column (1a.3) from million gallons to acre-feet.

(1b.4) Municipal Water Supply by Source – Mill Creek Lake **With** Return Flows. This is the amount of water diverted to the water treatment plant from Mill Creek Lake in acre-feet. It is determined by converting Column (1a.4) from million gallons to acre-feet using the conversion factor found in the Constants table.

(1b.5) Municipal Water Supply by Source – Total Municipal Supply. This is the total amount of water diverted for municipal water supply in acre-feet. It is the sum of Columns (1b.3) and (1b.4).

TABLE 2a – WASTEWATER DISCHARGES BY SOURCE FOR OUTFALL 1

This table indicates the source of wastewater discharges from the City of Canton's Outfall No. 1. The columns in the table are developed as follows:

(2.1) Date. This is the date to which the data apply.

(2.2) Outfall 1 Discharge (Million Gallons). This is the measured discharge from Outfall No. 1 expressed in million gallons from the effluent flow meter at the wastewater treatment plant.

(2.3) Outfall 1 Discharge (Acre-Feet). This is the measured discharge form Outfall No. 1 expressed in acre-feet. It is determined by converting Column (2.2) from million gallons to acre-feet.

(2.4) Source of Discharge (Acre-Feet) – Originating from Mill Creek Lake. This is the portion of the discharge from Outfall No. 1 that originates from Mill Creek Lake in acre-feet. It is computed two ways, and uses the minimum value of the two. First, Column (2.3) is multiplied by the calculated percentage from Column (1a.7) in Table 1a. Second, it compares that to the same day value from Column (1b.2) in Table 1b, and places the lesser value in the cell.

(2.5) Source of Discharge (Acre-Feet) – Originating from Groundwater. This is the portion of the discharge from Outfall No. 1 that originates from groundwater in acre-feet. It is computed two ways and uses the minimum value of the two. First, Column (2.3) is multiplied by the calculated percentage from Column (1a.8) in Table 1a. Second, it compares that to the same day value from Column (1b.3) in Table 1b, and places the lesser value in the cell.

(2.6) Source of Discharge (Acre-Feet) – Originating from Other Sources. This is the portion of the discharge from Outfall No. 1 that originates from "other sources" than the potable water supply system in acre-feet. Municipal wastewater discharges typically exceed water use volumes by a significant amount. An annual average ratio of 2:1 is not uncommon. This is primarily due to wet weather infiltration and inflow. It could also be due to draining of treatment plant tanks, swimming pools, septic tank haulers, etc. It is computed by subtracting Columns (2.4) and (2.5) from Column (2.3).

(2.7) Amount of Outfall No. 1 Subject to Environmental Flow Bypass (Million Gallons). This is the portion of the discharge from Outfall No. 1 that is less than or equal to the total authorized discharge of 1.3 Million Gallons per Day (MGD). The value is in million gallons. It is computed on a daily basis as the minimum of the actual discharge or 1.3 million gallons.

(2.8) Amount of Outfall No. 1 Subject to Environmental Flow Bypass (Acre-Feet). This is the portion of the discharge from Outfall No. 1 that is less than or equal to the total authorized discharge of 1.3 Million Gallons per Day (MGD). The value is in acre-feet. It is determined by converting Column (2.7) from million gallons to acre-feet.

(2.9) Date. This is the date to which the data in Column (2.10) apply.

(2.10) Average of Total Outfall No. 1 Discharge (Gallons). The daily values are the actual discharge volumes recorded by City operations staff based on totalized flow meter readings of the WWTP effluent into Mill Creek. The formulae cells calculate the average of the Outfall Discharge in Gallons for each month in 2018 based on the amount discharged every day. The upper cells compute the annual average of 722,867 gallons per day based on the monthly averages.

TABLE 2b – WASTEWATER DISCHARGES BY SOURCE FOR OUTFALL 2

This table indicates the source of wastewater discharges from the City of Canton's Proposed Outfall No. 2. The columns in the table are developed as follows:

(2.1) Date. This is the date to which the data apply.

(2.2) Outfall 2 Discharge (Million Gallons). This is the measured discharge from Outfall No. 2 expressed in million gallons, as measured by the meter at the Return Flow Pump Station at the wastewater treatment plant.

(2.3) Outfall 2 Discharge (Acre-Feet). This is the measured discharge form Outfall No. 2 expressed in acre-feet. It is determined by converting Column (2.2) from million gallons to acre-feet.

(2.4) Source of Discharge (Acre-Feet) – Originating from Mill Creek Lake. This is the portion of the discharge from Outfall No. 2 that originates from Mill Creek Lake in acre-feet. It is computed two ways and uses the minimum value of the two. First, Column (2.3) is multiplied by the calculated percentage from Column (1a.7) in Table 1a. Second, it compares that to the same day value from Column (1b.2) in Table 1b and places the lesser value in the cell.

(2.5) Source of Discharge (Acre-Feet) – Originating from Groundwater. This is the portion of the discharge from Outfall No. 2 that originates from groundwater in acre-feet. It is

computed two ways, and uses the minimum value of the two. First, Column (2.3) is multiplied by the calculated percentage from Column (1a.8) in Table 1a. Second, it compares that to the same day value from Column (1b.3) in Table 1b, and places the lesser value in the cell.

(2.6) Source of Discharge (Acre-Feet) – Originating from Other Sources. This is the portion of the discharge from Outfall No. 2 that originates from "other sources" than the potable water supply system in acre-feet. Municipal wastewater discharges typically exceed water use volumes by a significant amount. An annual average ratio of 2:1 is not uncommon. This is primarily due to wet weather infiltration and inflow. It could also be due to draining of treatment plant tanks, swimming pools, septic tank haulers, etc. It is computed by subtracting Columns (2.4) and (2.5) from Column (2.3).

(2.7) Amount of Outfall No. 2 Subject to Environmental Flow Bypass (Million Gallons). This is the portion of the discharge from Outfall No. 2 that is subject to environmental flow limitations. Since the water is pumped back to Mill Creek Lake prior to being discharged into Mill Creek, the value is "0".

(2.8) Amount of Outfall No. 1 Subject to Environmental Flow Bypass (Acre-Feet). This is the portion of the discharge from Outfall No. 2 that is subject to environmental flow limitations. Since the water is pumped back to Mill Creek Lake prior to being discharged into Mill Creek, the value is "0".

(2.9) Date. This is the date to which the data in Column (2.10) apply.

(2.10) Average of Total Outfall No. 2 Discharge (Gallons). The daily values are the actual discharge volumes recorded by City operations staff based on totalized flow meter readings of the WWTP effluent that is pumped back to Mill Creek Lake by the Return Flow Pumps. The formulae cells calculate the average of the Outfall Discharge in Gallons for each month in 2018 based on the amount discharged every day. The upper cells compute the annual average of 611,821 gallons per day based on the monthly averages. This amount should equal the total return flows from Column (1a.5) divided by 365.

TABLE 4 – ALLOWABLE REUSE DIVERSION AND ACTUAL DIVERSION FOR DISCHARGES FROM OUTFALL 1

This table computes the allowable reuse diversion and records the actual diversion. The columns in the table are developed as follows:

(4.1) Date. This is the date to which the data apply.

(4.2) Total Allowable Reuse Diversion (If Streamflow Conditions Met) (Million Gallons). This is the maximum allowable daily diversion for reuse in million gallons. It is the lesser of the sum of available diversion subject to instream flow and 1.30 million gallons. (1.30 million gallons is the maximum amount that can be diverted in any given day, and equates to 1,456.29 acre-feet per year. The maximum instantaneous diversion rate is 6.04 cfs, which equates to the 2-hour peak permitted flow of 3.9 MGD or 2,708 GPM in the TPDES discharge permit.) Note that the allowable reuse diversion may be reduced, if necessary, to meet the applicable streamflow provisions. A one day lag is included in this calculation. The displayed available diversion is for that of the previous day.

(4.3) Allowable Reuse Diversion (If Streamflow Conditions Met) (Acre-Feet). This is the maximum allowable diversion for reuse in acre-feet. It is determined by converting Column (4.2) from million gallons to acre-feet.

(4.4) Actual Reuse Diversion (Million Gallons). This is the actual measured diversion for reuse in million gallons.

(4.5) Actual Reuse Diversion (Acre-Feet). This is the actual diversion for reuse in acre-feet. It is determined by converting Column (4.4) from million gallons to acre-feet.

(4.6) Stream Flow at Gauge Downstream of Diversion (cfs). This is the actual amount of flow measured at the Flow Meter downstream of the diversion expressed in cubic feet per second (cfs).

(4.7) Bypass Requirement (cfs). The instream flow bypass requirement specified by TCEQ.

(4.8) Bypass Requirement Met? A test to see if the measured streamflow is greater than the bypass criteria. The value will be TRUE if the flow is greater than or equal to the criteria, and FALSE if it is less than the criteria. The monthly summary will be FALSE if flows on any day in the month are less than the criteria.

Comments
1 Developed by Jason Brown in March 2011 based on file provided by Brad Castleberry 2 Light Yellow shading represents input of raw data. 3 Unshaded cells are computed. 4 Revised by Gary Burton, P.E. and Dalton Brown in February 2017 in response to TCEQ comments letter dated 12/14/2015, including updated environmental flows. 5 Updated by Gary Burton, P.E. in July 2019 for amendment to add secondary diversion point.

Constants

Description	Name	Value		
Historical Average Discharge	Hist_Avg	0.72	MGD	
Loss from Outfall 1	Loss1	0.00%	0.0000	
Maximum Diversion Rate		6.04	cfs	
Maximum Annual Diversion	MaxRate	865	AF/Yr	
MG to acre-feet	MG2af	3.0688913		
MGD to acre-feet/yr	MGD2afy	1120.22		
cfs to MGD	cfs2MGD	0.646		
Digits rounded for MGD	MGDdigits	2		
Digits rounded for acre-feet	afdigits	1		

Instream (environmental) flow bypass requirement specified by TCEQ (cfs)		
6	Jan	Winter
6	Feb	
6	Mar	
3	Apr	Spring
3	May	
3	Jun	
1	Jul	Summer
1	Aug	
1	Sep	
1	Oct	Fall
1	Nov	
1	Dec	

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
January 2018	15.82	19.43	34.40	18.58	53.83	29.4%	36.1%	34.5%
February 2018	13.80	16.90	32.38	18.58	49.28	28.0%	34.3%	37.7%
March 2018	16.74	21.69	37.38	20.64	59.06	28.3%	36.7%	34.9%
April 2018	17.02	21.76	33.86	16.84	55.62	30.6%	39.1%	30.3%
May 2018	22.20	24.36	38.18	15.98	62.54	35.5%	39.0%	25.5%
June 2018	27.73	16.64	41.93	14.20	58.57	47.3%	28.4%	24.2%
July 2018	24.53	5.64	37.89	13.36	43.53	56.4%	13.0%	30.7%
August 2018	22.23	16.07	38.38	16.15	54.45	40.8%	29.5%	29.7%
September 2018	17.62	9.43	38.72	21.10	48.15	36.6%	19.6%	43.8%
October 2018	11.06	22.62	32.36	21.30	54.98	20.1%	41.1%	38.7%
November 2018	22.13	15.86	44.95	22.82	60.81	36.4%	26.1%	37.5%
December 2018	17.87	7.38	41.43	23.56	48.81	36.6%	15.1%	48.3%
2018 Total	**228.8**	**197.8**	**451.9**	**223.1**	**649.6**	**35.2%**	**30.4%**	**34.3%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
January 1, 2018	0.37	0.56	0.86	0.49	1.42	26.13%	39.55%	34.32%
January 2, 2018	0.16	0.50	0.75	0.59	1.25	12.83%	40.10%	47.07%
January 3, 2018	0.86	0.68	1.54	0.68	2.22	38.76%	30.64%	30.60%
January 4, 2018	0.64	0.74	1.16	0.52	1.90	33.72%	38.99%	27.29%
January 5, 2018	0.57	0.71	1.15	0.58	1.86	30.61%	38.13%	31.26%
January 6, 2018	0.61	0.61	1.12	0.51	1.73	35.26%	35.26%	29.48%
January 7, 2018	0.55	0.54	1.25	0.70	1.79	30.81%	30.25%	38.94%
January 8, 2018	0.41	0.64	0.99	0.58	1.63	25.15%	39.26%	35.58%
January 9, 2018	0.46	0.46	1.01	0.58	1.47	31.29%	31.29%	37.41%
January 10, 2018	0.46	0.48	1.05	0.59	1.53	30.05%	31.35%	38.60%
January 11, 2018	0.10	0.68	0.67	0.57	1.35	7.41%	50.37%	42.22%
January 12, 2018	0.64	0.78	1.03	0.39	1.81	35.46%	43.21%	21.33%
January 13, 2018	0.57	0.63	1.28	0.71	1.91	29.92%	33.07%	37.01%
January 14, 2018	0.36	0.42	0.92	0.56	1.34	26.79%	31.25%	41.96%
January 15, 2018	0.45	0.61	1.05	0.60	1.66	27.12%	36.77%	36.11%
January 16, 2018	0.52	0.62	1.07	0.55	1.69	30.70%	36.60%	32.70%
January 17, 2018	0.51	0.35	1.12	0.61	1.47	34.81%	23.89%	41.30%
January 18, 2018	0.61	0.90	1.38	0.77	2.28	26.75%	39.47%	33.77%
January 19, 2018	0.61	0.79	1.31	0.70	2.10	29.06%	37.64%	33.30%
January 20, 2018	0.55	0.74	1.12	0.57	1.86	29.65%	39.89%	30.46%
January 21, 2018	0.61	0.75	1.38	0.77	2.13	28.64%	35.21%	36.15%
January 22, 2018	0.69	0.77	1.35	0.66	2.12	32.50%	36.27%	31.23%
January 23, 2018	0.57	0.75	1.17	0.60	1.92	29.63%	38.98%	31.39%
January 24, 2018	0.45	0.59	1.11	0.66	1.70	26.52%	34.77%	38.72%
January 25, 2018	0.40	0.54	0.98	0.58	1.52	26.28%	35.48%	38.24%
January 26, 2018	0.50	0.50	1.10	0.60	1.60	31.25%	31.25%	37.50%
January 27, 2018	0.66	0.66	1.16	0.50	1.82	36.28%	36.28%	27.43%
January 28, 2018	0.57	0.58	1.13	0.56	1.71	33.43%	34.02%	32.55%
January 29, 2018	0.48	0.62	1.15	0.67	1.77	27.12%	35.03%	37.85%
January 30, 2018	0.44	0.65	0.95	0.51	1.60	27.59%	40.75%	31.66%
January 31, 2018	0.44	0.58	1.12	0.68	1.70	25.90%	34.14%	39.96%
January Total	**15.82**	**19.43**	**34.40**	**18.58**	**53.83**	**29.4%**	**36.1%**	**34.5%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
February 1, 2018	0.61	0.61	1.11	0.50	1.72	35.66%	35.42%	28.92%
February 2, 2018	0.44	0.50	1.06	0.62	1.56	28.26%	32.11%	39.63%
February 3, 2018	0.64	0.72	1.41	0.77	2.13	30.05%	33.80%	36.15%
February 4, 2018	0.59	0.67	1.15	0.56	1.82	32.35%	36.73%	30.92%
February 5, 2018	0.54	0.68	1.12	0.58	1.80	29.93%	37.69%	32.37%
February 6, 2018	0.25	0.43	1.02	0.77	1.45	17.24%	29.66%	53.10%
February 7, 2018	0.57	0.61	1.34	0.77	1.95	29.23%	31.28%	39.49%
February 8, 2018	0.62	0.72	1.36	0.74	2.08	29.78%	34.58%	35.64%
February 9, 2018	0.44	0.53	1.20	0.76	1.73	25.51%	30.72%	43.77%
February 10, 2018	0.29	0.45	0.83	0.54	1.28	22.66%	35.16%	42.19%
February 11, 2018	0.40	0.55	0.99	0.59	1.54	25.91%	35.62%	38.47%
February 12, 2018	0.40	0.50	1.01	0.61	1.51	26.53%	33.16%	40.32%
February 13, 2018	0.52	0.68	1.18	0.66	1.86	27.96%	36.56%	35.48%
February 14, 2018	0.38	0.47	0.98	0.60	1.45	26.24%	32.46%	41.30%
February 15, 2018	0.51	0.62	1.08	0.57	1.70	30.02%	36.49%	33.49%
February 16, 2018	0.52	0.52	1.15	0.63	1.67	31.12%	31.12%	37.76%
February 17, 2018	0.50	0.58	1.10	0.60	1.68	29.69%	34.44%	35.87%
February 18, 2018	0.51	0.60	1.12	0.61	1.72	29.74%	34.99%	35.28%
February 19, 2018	0.47	0.57	0.94	0.47	1.51	31.19%	37.82%	30.99%
February 20, 2018	0.49	0.67	1.26	0.77	1.93	25.39%	34.72%	39.90%
February 21, 2018	0.50	0.65	1.27	0.77	1.92	26.04%	33.85%	40.10%
February 22, 2018	0.44	0.64	1.21	0.77	1.85	23.78%	34.59%	41.62%
February 23, 2018	0.65	0.71	1.42	0.77	2.13	30.52%	33.33%	36.15%
February 24, 2018	0.48	0.62	1.25	0.77	1.87	25.67%	33.16%	41.18%
February 25, 2018	0.38	0.58	1.15	0.77	1.73	21.97%	33.53%	44.51%
February 26, 2018	0.44	0.56	1.21	0.77	1.77	24.86%	31.64%	43.50%
February 27, 2018	0.50	0.77	1.27	0.77	2.04	24.51%	37.75%	37.75%
February 28, 2018	0.72	0.69	1.19	0.47	1.88	38.22%	36.62%	25.16%
February 29, 2018 (if leap year)								
February Total	**13.80**	**16.90**	**32.38**	**18.58**	**49.28**	**28.0%**	**34.3%**	**37.7%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
March 1, 2018	0.57	0.76	1.34	0.77	2.10	27.14%	36.19%	36.67%
March 2, 2018	0.55	0.64	1.32	0.77	1.96	28.06%	32.65%	39.29%
March 3, 2018	0.69	0.85	1.46	0.77	2.31	29.87%	36.80%	33.33%
March 4, 2018	0.48	0.66	1.25	0.77	1.91	25.13%	34.55%	40.31%
March 5, 2018	0.59	0.73	1.30	0.71	2.03	29.02%	35.91%	35.07%
March 6, 2018	0.51	0.64	1.19	0.68	1.83	27.91%	35.03%	37.06%
March 7, 2018	0.34	0.57	1.05	0.71	1.62	21.00%	35.02%	43.98%
March 8, 2018	0.49	0.63	1.17	0.68	1.80	27.25%	35.04%	37.71%
March 9, 2018	0.59	0.78	1.27	0.68	2.05	28.79%	38.07%	33.14%
March 10, 2018	0.39	0.52	0.97	0.58	1.49	26.23%	34.97%	38.80%
March 11, 2018	0.47	0.62	1.08	0.61	1.70	27.66%	36.49%	35.84%
March 12, 2018	0.53	0.68	1.12	0.59	1.80	29.41%	37.74%	32.85%
March 13, 2018	0.48	0.62	1.09	0.61	1.71	28.14%	36.34%	35.52%
March 14, 2018	0.35	0.52	0.96	0.61	1.48	23.70%	35.21%	41.10%
March 15, 2018	0.53	0.71	1.13	0.60	1.84	28.77%	38.55%	32.68%
March 16, 2018	0.48	0.60	1.03	0.55	1.63	29.45%	36.81%	33.74%
March 17, 2018	0.51	0.65	1.28	0.77	1.93	26.42%	33.68%	39.90%
March 18, 2018	0.49	0.62	1.18	0.69	1.80	27.22%	34.44%	38.33%
March 19, 2018	0.49	0.65	1.10	0.61	1.75	28.02%	37.16%	34.82%
March 20, 2018	0.50	0.61	1.12	0.62	1.73	28.95%	35.32%	35.73%
March 21, 2018	0.49	0.65	1.12	0.63	1.77	27.67%	36.70%	35.63%
March 22, 2018	0.64	0.81	1.23	0.59	2.04	31.39%	39.73%	28.89%
March 23, 2018	0.65	0.82	1.23	0.58	2.05	31.75%	40.06%	28.19%
March 24, 2018	0.39	0.58	0.96	0.57	1.54	25.29%	37.61%	37.09%
March 25, 2018	0.39	0.58	0.90	0.51	1.48	26.37%	39.22%	34.42%
March 26, 2018	0.69	0.81	1.23	0.54	2.04	33.84%	39.73%	26.43%
March 27, 2018	0.74	0.94	1.51	0.77	2.45	30.20%	38.37%	31.43%
March 28, 2018	0.70	0.90	1.47	0.77	2.37	29.54%	37.97%	32.49%
March 29, 2018	0.66	0.82	1.43	0.77	2.25	29.33%	36.44%	34.22%
March 30, 2018	0.68	0.85	1.45	0.77	2.30	29.57%	36.96%	33.48%
March 31, 2018	0.68	0.87	1.45	0.77	2.32	29.31%	37.50%	33.19%
March Total	**16.74**	**21.69**	**37.38**	20.64	**59.06**	**28.3%**	**36.7%**	**34.9%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
April 1, 2018	0.68	0.87	1.29	0.61	2.16	31.55%	40.37%	28.07%
April 2, 2018	0.64	0.81	1.27	0.63	2.08	30.71%	38.87%	30.42%
April 3, 2018	0.50	0.70	1.10	0.60	1.80	27.86%	39.00%	33.15%
April 4, 2018	0.49	0.64	1.12	0.63	1.76	27.86%	36.38%	35.76%
April 5, 2018	0.59	0.75	1.36	0.77	2.11	27.96%	35.55%	36.49%
April 6, 2018	0.58	0.63	1.16	0.58	1.79	32.38%	35.18%	32.44%
April 7, 2018	0.46	0.73	1.02	0.56	1.75	26.35%	41.81%	31.84%
April 8, 2018	0.59	0.61	1.16	0.57	1.77	33.30%	34.42%	32.28%
April 9, 2018	0.61	0.72	1.18	0.57	1.90	32.07%	37.85%	30.07%
April 10, 2018	0.73	0.96	1.31	0.58	2.27	32.19%	42.33%	25.49%
April 11, 2018	0.54	0.72	1.11	0.57	1.83	29.56%	39.41%	31.03%
April 12, 2018	0.54	0.63	1.10	0.56	1.73	31.29%	36.50%	32.21%
April 13, 2018	0.58	0.69	1.18	0.60	1.87	30.95%	36.82%	32.23%
April 14, 2018	0.54	0.63	1.14	0.60	1.77	30.54%	35.63%	33.82%
April 15, 2018	0.46	0.58	0.98	0.52	1.56	29.51%	37.20%	33.29%
April 16, 2018	0.69	0.84	1.24	0.55	2.08	33.25%	40.48%	26.27%
April 17, 2018	0.34	0.53	0.93	0.59	1.46	23.32%	36.35%	40.33%
April 18, 2018	0.67	0.86	1.22	0.55	2.08	32.27%	41.43%	26.30%
April 19, 2018	0.70	0.87	1.33	0.63	2.20	31.80%	39.53%	28.67%
April 20, 2018	0.65	0.74	1.42	0.77	2.16	30.09%	34.26%	35.65%
April 21, 2018	0.68	0.88	1.17	0.49	2.05	33.11%	42.84%	24.05%
April 22, 2018	0.49	0.71	1.06	0.57	1.77	27.64%	40.05%	32.32%
April 23, 2018	0.50	0.69	1.11	0.61	1.80	27.78%	38.33%	33.89%
April 24, 2018	0.53	0.65	1.09	0.56	1.74	30.55%	37.46%	31.99%
April 25, 2018	0.62	0.81	1.21	0.59	2.02	30.68%	40.08%	29.24%
April 26, 2018	0.44	0.61	1.04	0.60	1.65	26.75%	37.08%	36.17%
April 27, 2018	0.59	0.77	1.00	0.41	1.77	33.31%	43.48%	23.21%
April 28, 2018	0.48	0.65	0.69	0.21	1.34	35.74%	48.40%	15.86%
April 29, 2018	0.50	0.68	0.71	0.21	1.39	35.95%	48.89%	15.17%
April 30, 2018	0.61	0.80	1.18	0.57	1.98	30.85%	40.47%	28.68%
April Total	**17.02**	**21.76**	**33.86**	**16.84**	**55.62**	**30.6%**	**39.1%**	**30.3%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
May 1, 2018	0.67	0.85	1.23	0.56	2.08	32.29%	40.96%	26.75%
May 2, 2018	0.66	0.83	1.27	0.61	2.10	31.46%	39.56%	28.98%
May 3, 2018	0.68	0.87	1.45	0.77	2.32	29.31%	37.50%	33.19%
May 4, 2018	0.64	0.83	1.41	0.77	2.24	28.57%	37.05%	34.38%
May 5, 2018	0.66	0.85	1.43	0.77	2.28	28.95%	37.28%	33.77%
May 6, 2018	0.67	0.86	1.42	0.75	2.28	29.35%	37.67%	32.98%
May 7, 2018	0.69	0.89	1.30	0.61	2.19	31.45%	40.57%	27.99%
May 8, 2018	0.51	0.69	1.08	0.57	1.77	28.88%	39.07%	32.05%
May 9, 2018	0.59	0.74	1.12	0.53	1.86	31.69%	39.74%	28.57%
May 10, 2018	0.67	0.82	1.27	0.60	2.09	32.03%	39.20%	28.78%
May 11, 2018	0.65	0.85	1.15	0.50	2.00	32.48%	42.48%	25.04%
May 12, 2018	0.56	0.76	0.77	0.21	1.53	36.55%	49.61%	13.84%
May 13, 2018	0.58	0.74	1.03	0.45	1.77	32.73%	41.76%	25.51%
May 14, 2018	0.66	1.85	1.12	0.46	2.97	22.23%	62.31%	15.46%
May 15, 2018	0.59	0.76	1.16	0.57	1.92	30.75%	39.60%	29.65%
May 16, 2018	0.67	0.86	1.01	0.34	1.87	35.83%	45.99%	18.18%
May 17, 2018	0.65	0.83	1.00	0.35	1.83	35.58%	45.43%	18.99%
May 18, 2018	0.94	0.85	1.39	0.45	2.24	41.96%	37.95%	20.09%
May 19, 2018	1.14	0.71	1.60	0.46	2.31	49.31%	30.71%	19.98%
May 20, 2018	0.60	0.76	1.17	0.57	1.93	31.07%	39.36%	29.57%
May 21, 2018	0.51	0.43	0.80	0.29	1.23	41.33%	34.85%	23.82%
May 22, 2018	0.77	0.68	1.54	0.77	2.22	34.68%	30.63%	34.68%
May 23, 2018	0.86	0.50	1.19	0.33	1.69	50.98%	29.64%	19.38%
May 24, 2018	0.61	0.80	1.04	0.43	1.84	33.10%	43.41%	23.49%
May 25, 2018	0.90	0.78	1.07	0.17	1.85	48.62%	42.14%	9.24%
May 26, 2018	0.59	0.78	0.87	0.28	1.65	35.69%	47.19%	17.12%
May 27, 2018	0.62	0.80	0.86	0.24	1.66	37.30%	48.13%	14.56%
May 28, 2018	1.01	0.56	1.70	0.69	2.26	44.69%	24.78%	30.53%
May 29, 2018	0.95	0.66	1.52	0.57	2.18	43.60%	30.29%	26.11%
May 30, 2018	0.97	0.68	1.61	0.64	2.29	42.43%	29.75%	27.82%
May 31, 2018	0.93	0.49	1.59	0.66	2.08	44.71%	23.56%	31.73%
May Total	**22.20**	**24.36**	**38.18**	**15.98**	**62.54**	**35.5%**	**39.0%**	**25.5%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
June 1, 2018	1.10	0.83	1.87	0.77	2.70	40.74%	30.74%	28.52%
June 2, 2018	1.00	0.69	1.69	0.69	2.38	42.05%	29.02%	28.93%
June 3, 2018	0.88	0.57	1.58	0.70	2.15	41.01%	26.56%	32.43%
June 4, 2018	0.86	0.57	1.46	0.60	2.03	42.32%	28.05%	29.63%
June 5, 2018	0.48	0.68	1.02	0.54	1.70	28.19%	39.93%	31.88%
June 6, 2018	0.67	0.82	1.20	0.53	2.02	33.25%	40.69%	26.05%
June 7, 2018	1.15	0.78	1.46	0.31	2.24	51.32%	34.81%	13.88%
June 8, 2018	1.08	0.66	1.38	0.30	2.04	52.94%	32.35%	14.71%
June 9, 2018	0.63	0.82	0.85	0.22	1.67	37.79%	49.19%	13.02%
June 10, 2018	1.15	0.76	1.43	0.28	2.19	52.54%	34.72%	12.75%
June 11, 2018	1.13	0.58	1.40	0.27	1.98	57.04%	29.28%	13.68%
June 12, 2018	0.83	0.47	1.48	0.65	1.95	42.56%	24.10%	33.33%
June 13, 2018	1.12	0.81	1.51	0.39	2.32	48.21%	34.87%	16.92%
June 14, 2018	0.98	0.54	1.62	0.64	2.16	45.39%	25.01%	29.60%
June 15, 2018	0.95	0.60	1.49	0.54	2.09	45.50%	28.74%	25.77%
June 16, 2018	0.78	0.43	1.35	0.57	1.78	43.82%	24.16%	32.02%
June 17, 2018	0.90	0.57	1.67	0.77	2.24	40.18%	25.45%	34.38%
June 18, 2018	1.07	0.28	1.33	0.26	1.61	66.50%	17.40%	16.10%
June 19, 2018	1.42	0.57	2.17	0.75	2.74	51.82%	20.80%	27.37%
June 20, 2018	0.52	0.71	1.21	0.69	1.92	27.07%	36.96%	35.97%
June 21, 2018	0.57	0.75	0.84	0.27	1.59	35.85%	47.17%	16.98%
June 22, 2018	0.68	0.30	0.93	0.25	1.23	55.51%	24.49%	20.00%
June 23, 2018	0.65	0.22	0.93	0.28	1.15	56.52%	19.13%	24.35%
June 24, 2018	0.86	0.53	1.16	0.30	1.69	50.95%	31.40%	17.65%
June 25, 2018	0.79	0.30	1.05	0.26	1.35	58.61%	22.26%	19.14%
June 26, 2018	1.28	0.44	2.05	0.77	2.49	51.41%	17.67%	30.92%
June 27, 2018	1.36	0.46	1.49	0.13	1.95	69.71%	23.58%	6.71%
June 28, 2018	0.95	0.20	1.44	0.49	1.64	58.03%	12.22%	29.75%
June 29, 2018	0.94	0.36	1.45	0.51	1.81	51.82%	19.85%	28.34%
June 30, 2018	0.95	0.34	1.44	0.49	1.78	53.43%	19.12%	27.45%
June Total	**27.73**	**16.64**	**41.93**	**14.20**	**58.57**	**47.3%**	**28.4%**	**24.2%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
July 1, 2018	0.94	0.37	1.28	0.34	1.65	57.04%	22.45%	20.51%
July 2, 2018	0.95	0.34	1.19	0.24	1.53	62.01%	22.19%	15.80%
July 3, 2018	0.93	0.08	1.29	0.36	1.37	68.03%	5.85%	26.12%
July 4, 2018	0.95	0.20	1.14	0.19	1.34	71.00%	14.95%	14.05%
July 5, 2018	0.95	0.14	1.23	0.28	1.37	69.39%	10.23%	20.38%
July 6, 2018	0.94	0.00	1.17	0.23	1.17	80.41%	0.00%	19.59%
July 7, 2018	1.00	0.00	1.33	0.33	1.33	74.96%	0.00%	25.04%
July 8, 2018	1.00	0.00	1.33	0.33	1.33	75.36%	0.00%	24.64%
July 9, 2018	0.95	0.00	1.71	0.76	1.71	55.49%	0.00%	44.51%
July 10, 2018	0.91	0.21	1.68	0.77	1.89	48.15%	11.11%	40.74%
July 11, 2018	0.56	0.00	1.29	0.73	1.29	43.44%	0.00%	56.56%
July 12, 2018	0.56	0.12	1.32	0.76	1.44	38.89%	8.33%	52.78%
July 13, 2018	0.65	0.09	1.17	0.52	1.26	51.51%	7.13%	41.36%
July 14, 2018	0.53	0.00	1.07	0.54	1.07	49.39%	0.00%	50.61%
July 15, 2018	0.74	0.00	1.51	0.77	1.51	49.01%	0.00%	50.99%
July 16, 2018	0.69	0.09	1.35	0.66	1.44	48.05%	6.27%	45.68%
July 17, 2018	0.62	0.27	1.27	0.65	1.54	40.23%	17.52%	42.25%
July 18, 2018	0.64	0.15	1.04	0.40	1.19	53.74%	12.59%	33.67%
July 19, 2018	0.84	0.10	0.93	0.09	1.03	81.40%	9.69%	8.91%
July 20, 2018	0.90	0.10	1.12	0.22	1.22	73.83%	8.20%	17.97%
July 21, 2018	0.84	0.67	1.25	0.41	1.92	43.77%	34.91%	21.31%
July 22, 2018	0.75	0.40	0.99	0.24	1.39	53.92%	28.76%	17.33%
July 23, 2018	0.94	0.14	1.35	0.41	1.49	63.00%	9.38%	27.61%
July 24, 2018	0.79	0.21	1.46	0.67	1.67	47.25%	12.56%	40.19%
July 25, 2018	0.86	0.21	1.18	0.32	1.39	61.83%	15.10%	23.08%
July 26, 2018	0.78	0.21	0.91	0.13	1.12	69.83%	18.80%	11.37%
July 27, 2018	0.92	0.21	1.20	0.28	1.41	65.48%	14.95%	19.57%
July 28, 2018	0.45	0.37	0.79	0.34	1.16	38.83%	31.92%	29.25%
July 29, 2018	0.57	0.42	0.76	0.19	1.18	48.22%	35.53%	16.24%
July 30, 2018	0.64	0.20	1.21	0.57	1.41	45.26%	14.14%	40.59%
July 31, 2018	0.74	0.34	1.37	0.63	1.71	43.30%	19.89%	36.81%
July Total	**24.53**	**5.64**	**37.89**	**13.36**	**43.53**	**56.4%**	**13.0%**	**30.7%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
August 1, 2018	0.82	0.15	1.16	0.34	1.31	62.69%	11.47%	25.84%
August 2, 2018	0.77	0.40	1.08	0.31	1.48	52.13%	27.08%	20.79%
August 3, 2018	0.75	0.62	1.45	0.70	2.07	36.23%	29.95%	33.82%
August 4, 2018	0.87	0.42	1.34	0.47	1.76	49.35%	23.82%	26.83%
August 5, 2018	0.65	0.39	1.04	0.39	1.43	45.39%	27.23%	27.37%
August 6, 2018	0.84	0.44	1.14	0.30	1.58	53.20%	27.87%	18.94%
August 7, 2018	0.71	0.65	1.48	0.77	2.13	33.33%	30.52%	36.15%
August 8, 2018	1.04	0.59	1.44	0.40	2.03	51.31%	29.11%	19.59%
August 9, 2018	0.60	0.67	0.99	0.39	1.66	36.12%	40.34%	23.54%
August 10, 2018	0.60	0.68	0.84	0.24	1.52	39.42%	44.68%	15.90%
August 11, 2018	0.80	0.53	1.28	0.48	1.81	44.25%	29.31%	26.44%
August 12, 2018	0.54	0.15	1.31	0.77	1.46	36.99%	10.27%	52.74%
August 13, 2018	0.59	0.10	1.31	0.72	1.41	41.76%	7.08%	51.17%
August 14, 2018	0.41	0.68	1.13	0.72	1.81	22.70%	37.65%	39.65%
August 15, 2018	0.54	0.08	1.16	0.62	1.24	43.72%	6.48%	49.80%
August 16, 2018	0.72	0.52	1.32	0.60	1.84	39.11%	28.25%	32.65%
August 17, 2018	0.70	0.24	1.39	0.69	1.63	42.94%	14.72%	42.33%
August 18, 2018	0.70	0.49	1.29	0.59	1.78	39.37%	27.56%	33.07%
August 19, 2018	0.51	0.21	1.03	0.52	1.24	41.20%	16.96%	41.84%
August 20, 2018	0.73	0.59	1.29	0.56	1.88	38.83%	31.38%	29.79%
August 21, 2018	0.65	0.64	1.30	0.65	1.94	33.52%	33.01%	33.47%
August 22, 2018	0.80	0.32	1.57	0.77	1.89	42.40%	16.96%	40.65%
August 23, 2018	0.71	0.66	1.15	0.44	1.81	39.16%	36.40%	24.43%
August 24, 2018	0.87	0.67	1.11	0.24	1.78	48.90%	37.66%	13.43%
August 25, 2018	0.69	0.75	0.93	0.24	1.68	41.00%	44.56%	14.44%
August 26, 2018	0.64	0.86	1.02	0.38	1.88	33.99%	45.67%	20.34%
August 27, 2018	0.79	0.64	1.36	0.57	2.00	39.60%	32.08%	28.32%
August 28, 2018	0.66	0.60	1.00	0.34	1.60	41.28%	37.52%	21.20%
August 29, 2018	0.82	0.65	1.57	0.75	2.22	36.89%	29.24%	33.87%
August 30, 2018	0.99	0.81	1.56	0.57	2.37	41.70%	34.12%	24.18%
August 31, 2018	0.72	0.87	1.35	0.63	2.22	32.45%	39.21%	28.35%
August Total	**22.23**	**16.07**	**38.38**	**16.15**	**54.45**	**40.8%**	**29.5%**	**29.7%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
September 1, 2018	0.98	0.75	1.75	0.77	2.50	39.20%	30.00%	30.80%
September 2, 2018	0.62	0.52	0.99	0.37	1.51	41.01%	34.39%	24.60%
September 3, 2018	0.78	0.52	1.53	0.75	2.05	38.07%	25.38%	36.55%
September 4, 2018	0.50	0.29	1.27	0.77	1.56	32.05%	18.59%	49.36%
September 5, 2018	0.47	0.42	1.18	0.71	1.60	29.47%	26.33%	44.20%
September 6, 2018	0.51	0.19	1.22	0.71	1.41	36.30%	13.52%	50.18%
September 7, 2018	0.69	0.47	1.46	0.77	1.93	35.75%	24.35%	39.90%
September 8, 2018	0.47	0.18	1.16	0.69	1.34	35.10%	13.44%	51.46%
September 9, 2018	0.54	0.12	1.18	0.64	1.30	41.47%	9.22%	49.31%
September 10, 2018	0.45	0.32	1.22	0.77	1.54	29.22%	20.78%	50.00%
September 11, 2018	0.51	0.08	1.25	0.74	1.33	38.23%	6.00%	55.77%
September 12, 2018	0.45	0.37	1.06	0.61	1.43	31.42%	25.84%	42.74%
September 13, 2018	0.64	0.28	1.35	0.71	1.63	39.38%	17.23%	43.38%
September 14, 2018	0.66	0.11	1.43	0.77	1.54	42.86%	7.14%	50.00%
September 15, 2018	0.41	0.20	1.05	0.64	1.25	32.88%	16.04%	51.08%
September 16, 2018	0.52	0.15	1.17	0.65	1.32	39.48%	11.39%	49.13%
September 17, 2018	0.47	0.19	1.18	0.71	1.37	34.23%	13.84%	51.93%
September 18, 2018	0.58	0.20	1.32	0.74	1.52	38.11%	13.14%	48.75%
September 19, 2018	0.54	0.20	1.18	0.64	1.38	39.19%	14.51%	46.30%
September 20, 2018	0.55	0.21	1.19	0.64	1.40	39.17%	14.96%	45.87%
September 21, 2018	0.77	0.38	1.54	0.77	1.92	40.10%	19.79%	40.10%
September 22, 2018	0.39	0.28	1.16	0.77	1.44	27.08%	19.44%	53.47%
September 23, 2018	0.48	0.13	1.15	0.67	1.28	37.50%	10.16%	52.34%
September 24, 2018	0.60	0.47	1.29	0.69	1.76	34.11%	26.72%	39.17%
September 25, 2018	0.46	0.25	1.08	0.62	1.33	34.48%	18.74%	46.78%
September 26, 2018	0.60	0.45	1.37	0.77	1.82	32.97%	24.73%	42.31%
September 27, 2018	0.81	0.56	1.55	0.74	2.11	38.41%	26.55%	35.04%
September 28, 2018	0.90	0.24	1.64	0.74	1.88	47.97%	12.79%	39.23%
September 29, 2018	0.64	0.74	1.41	0.77	2.15	29.77%	34.42%	35.81%
September 30, 2018	0.63	0.16	1.40	0.77	1.56	40.38%	10.26%	49.36%
September Total	**17.62**	**9.43**	**38.72**	**21.10**	**48.15**	**36.6%**	**19.6%**	**43.8%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
October 1, 2018	0.61	0.31	1.23	0.62	1.54	39.51%	20.08%	40.41%
October 2, 2018	0.42	0.62	1.04	0.62	1.66	25.33%	37.39%	37.27%
October 3, 2018	0.50	0.28	1.11	0.61	1.39	36.05%	20.19%	43.76%
October 4, 2018	0.44	0.70	0.72	0.28	1.42	30.94%	49.23%	19.83%
October 5, 2018	0.38	0.81	1.15	0.77	1.96	19.39%	41.33%	39.29%
October 6, 2018	0.35	0.83	0.87	0.52	1.70	20.54%	48.71%	30.75%
October 7, 2018	0.50	0.81	1.15	0.65	1.96	25.47%	41.26%	33.27%
October 8, 2018	0.64	0.67	1.22	0.58	1.89	33.81%	35.39%	30.80%
October 9, 2018	0.47	0.47	1.24	0.77	1.71	27.49%	27.49%	45.03%
October 10, 2018	0.47	0.74	0.98	0.51	1.72	27.29%	42.97%	29.73%
October 11, 2018	0.43	0.66	0.97	0.54	1.63	26.38%	40.49%	33.13%
October 12, 2018	0.30	0.92	1.07	0.77	1.99	15.08%	46.23%	38.69%
October 13, 2018	0.10	0.72	0.87	0.77	1.59	6.29%	45.28%	48.43%
October 14, 2018	0.39	0.82	1.16	0.77	1.98	19.70%	41.41%	38.89%
October 15, 2018	0.27	0.80	1.04	0.77	1.84	14.67%	43.48%	41.85%
October 16, 2018	0.00	0.89	0.77	0.77	1.66	0.00%	53.61%	46.39%
October 17, 2018	0.33	0.74	1.10	0.77	1.84	17.93%	40.22%	41.85%
October 18, 2018	0.40	0.79	1.11	0.71	1.90	21.03%	41.54%	37.43%
October 19, 2018	0.29	0.71	1.06	0.77	1.77	16.38%	40.11%	43.50%
October 20, 2018	0.00	0.81	0.77	0.77	1.58	0.00%	51.27%	48.73%
October 21, 2018	0.39	0.80	1.07	0.68	1.87	20.81%	42.69%	36.50%
October 22, 2018	0.41	0.80	1.06	0.65	1.86	22.08%	43.08%	34.84%
October 23, 2018	0.61	0.81	1.25	0.64	2.06	29.61%	39.32%	31.07%
October 24, 2018	0.48	0.94	1.25	0.77	2.19	21.92%	42.92%	35.16%
October 25, 2018	0.57	0.67	1.34	0.77	2.01	28.36%	33.33%	38.31%
October 26, 2018	0.23	0.83	1.00	0.77	1.83	12.57%	45.36%	42.08%
October 27, 2018	0.09	0.76	0.83	0.74	1.59	5.66%	47.80%	46.54%
October 28, 2018	0.61	0.84	1.31	0.70	2.15	28.41%	39.12%	32.46%
October 29, 2018	0.27	0.86	0.96	0.69	1.82	14.84%	47.28%	37.88%
October 30, 2018	0.01	0.79	0.78	0.77	1.57	0.64%	50.32%	49.04%
October 31, 2018	0.10	0.42	0.87	0.77	1.29	7.75%	32.56%	59.69%
October Total	**11.06**	**22.62**	**32.36**	**21.30**	**54.98**	**20.1%**	**41.1%**	**38.7%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
November 1, 2018	0.79	0.21	1.56	0.77	1.77	44.63%	11.86%	43.50%
November 2, 2018	0.94	0.34	1.71	0.77	2.05	45.85%	16.59%	37.56%
November 3, 2018	1.14	0.55	1.91	0.77	2.46	46.34%	22.36%	31.30%
November 4, 2018	0.90	0.50	1.67	0.77	2.17	41.47%	23.04%	35.48%
November 5, 2018	0.61	0.73	1.38	0.77	2.11	28.91%	34.60%	36.49%
November 6, 2018	0.64	0.86	1.41	0.77	2.27	28.19%	37.89%	33.92%
November 7, 2018	0.62	0.74	1.28	0.66	2.02	30.71%	36.65%	32.64%
November 8, 2018	0.60	0.75	1.37	0.77	2.12	28.30%	35.38%	36.32%
November 9, 2018	0.64	0.83	1.41	0.77	2.24	28.57%	37.05%	34.38%
November 10, 2018	0.62	0.81	1.26	0.64	2.07	29.98%	39.17%	30.85%
November 11, 2018	0.62	0.80	1.39	0.77	2.19	28.31%	36.53%	35.16%
November 12, 2018	0.64	0.79	1.41	0.77	2.20	29.09%	35.91%	35.00%
November 13, 2018	1.32	1.31	2.09	0.77	3.40	38.82%	38.53%	22.65%
November 14, 2018	0.57	0.77	1.34	0.77	2.11	27.01%	36.49%	36.49%
November 15, 2018	0.79	0.54	1.56	0.77	2.10	37.62%	25.71%	36.67%
November 16, 2018	0.89	0.39	1.66	0.77	2.05	43.41%	19.02%	37.56%
November 17, 2018	0.89	0.39	1.66	0.77	2.05	43.41%	19.02%	37.56%
November 18, 2018	0.55	0.37	1.32	0.77	1.69	32.54%	21.89%	45.56%
November 19, 2018	0.62	0.28	1.39	0.77	1.67	37.13%	16.77%	46.11%
November 20, 2018	0.72	0.51	1.49	0.77	2.00	36.00%	25.50%	38.50%
November 21, 2018	0.66	0.36	1.43	0.77	1.79	36.87%	20.11%	43.02%
November 22, 2018	0.61	0.32	1.38	0.77	1.70	35.88%	18.82%	45.29%
November 23, 2018	0.68	0.45	1.45	0.77	1.90	35.79%	23.68%	40.53%
November 24, 2018	0.70	0.43	1.47	0.77	1.90	36.84%	22.63%	40.53%
November 25, 2018	0.66	0.35	1.43	0.77	1.78	37.08%	19.66%	43.26%
November 26, 2018	0.57	0.38	1.34	0.77	1.72	33.14%	22.09%	44.77%
November 27, 2018	0.87	0.39	1.64	0.77	2.03	42.86%	19.21%	37.93%
November 28, 2018	0.73	0.14	1.50	0.77	1.64	44.51%	8.54%	46.95%
November 29, 2018	0.67	0.21	1.40	0.73	1.61	41.54%	13.02%	45.44%
November 30, 2018	0.87	0.36	1.64	0.77	2.00	43.50%	18.00%	38.50%
November Total	**22.13**	**15.86**	**44.95**	**22.82**	**60.81**	**36.4%**	**26.1%**	**37.5%**

Table 1a - Basic Municipal Water Supply Source Data for Canton for 2018

(1a.1) Date	Municipal Water Supply by Source (Million Gallons)					Percentage of Use by Original Source		
	(1a.2) Originating from Mill Creek Lake w/o Return Flows	(1a.3) Originating from Groundwater	(1a.4) Originating from Mill Creek Lake With Return Flows	(1a.5) Return Flows	(1a.6) Total Municipal Supply	(1a.7) Mill Creek Lake	(1a.8) Ground water	(1a.8) Return Flows
December 1, 2018	0.89	0.43	1.66	0.77	2.09	42.58%	20.57%	36.84%
December 2, 2018	0.83	0.21	1.60	0.77	1.81	45.86%	11.60%	42.54%
December 3, 2018	0.76	0.17	1.53	0.77	1.70	44.71%	10.00%	45.29%
December 4, 2018	0.71	0.17	1.48	0.77	1.65	43.03%	10.30%	46.67%
December 5, 2018	0.73	0.25	1.50	0.77	1.75	41.71%	14.29%	44.00%
December 6, 2018	0.55	0.25	1.32	0.77	1.57	35.03%	15.92%	49.04%
December 7, 2018	0.56	0.31	1.33	0.77	1.64	34.15%	18.90%	46.95%
December 8, 2018	0.85	0.01	1.62	0.77	1.63	52.15%	0.61%	47.24%
December 9, 2018	0.72	0.00	1.49	0.77	1.49	48.32%	0.00%	51.68%
December 10, 2018	0.47	0.19	1.24	0.77	1.43	32.87%	13.29%	53.85%
December 11, 2018	0.43	0.47	1.20	0.77	1.67	25.75%	28.14%	46.11%
December 12, 2018	0.38	0.43	1.15	0.77	1.58	24.05%	27.22%	48.73%
December 13, 2018	0.43	0.39	1.20	0.77	1.59	27.04%	24.53%	48.43%
December 14, 2018	0.55	0.19	1.32	0.77	1.51	36.42%	12.58%	50.99%
December 15, 2018	0.66	0.22	1.43	0.77	1.65	40.00%	13.33%	46.67%
December 16, 2018	0.49	0.38	1.26	0.77	1.64	29.88%	23.17%	46.95%
December 17, 2018	0.59	0.32	1.36	0.77	1.68	35.12%	19.05%	45.83%
December 18, 2018	0.33	0.53	1.10	0.77	1.63	20.25%	32.52%	47.24%
December 19, 2018	0.55	0.14	1.32	0.77	1.46	37.67%	9.59%	52.74%
December 20, 2018	0.44	0.23	1.21	0.77	1.44	30.56%	15.97%	53.47%
December 21, 2018	0.62	0.21	1.39	0.77	1.60	38.75%	13.13%	48.13%
December 22, 2018	0.54	0.23	1.31	0.77	1.54	35.06%	14.94%	50.00%
December 23, 2018	0.51	0.18	1.28	0.77	1.46	34.93%	12.33%	52.74%
December 24, 2018	0.56	0.17	1.26	0.70	1.43	39.19%	11.90%	48.92%
December 25, 2018	0.53	0.00	1.21	0.68	1.21	43.69%	0.00%	56.31%
December 26, 2018	0.47	0.00	1.24	0.77	1.24	37.90%	0.00%	62.10%
December 27, 2018	0.74	0.28	1.51	0.77	1.79	41.34%	15.64%	43.02%
December 28, 2018	0.55	0.21	1.17	0.62	1.38	39.86%	15.22%	44.93%
December 29, 2018	0.47	0.31	1.24	0.77	1.55	30.32%	20.00%	49.68%
December 30, 2018	0.40	0.11	1.17	0.77	1.28	31.25%	8.59%	60.16%
December 31, 2018	0.56	0.39	1.33	0.77	1.72	32.64%	22.65%	44.72%
December Total	**17.87**	**7.38**	**41.43**	**23.56**	**48.81**	**36.6%**	**15.1%**	**48.3%**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
January 2018	48.5	59.6	105.6	108.2
February 2018	42.4	51.9	99.4	94.2
March 2018	51.4	66.6	114.7	117.9
April 2018	52.2	66.8	103.9	119.0
May 2018	68.1	74.8	117.2	142.9
June 2018	57.6	30.7	128.7	88.2
July 2018	75.3	17.3	116.3	92.6
August 2018	68.2	49.3	117.8	117.5
September 2018	54.1	28.9	118.8	83.0
October 2018	33.9	69.4	99.3	103.4
November 2018	67.9	48.7	137.9	116.6
December 2018	54.8	22.6	127.2	77.5
2018 Total	**674.5**	**586.5**	**1,386.7**	**1,261.1**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
January 1, 2018	1.1	1.7	2.6	4.3
January 2, 2018	0.5	1.5	2.3	3.8
January 3, 2018	2.6	2.1	4.7	6.8
January 4, 2018	2.0	2.3	3.6	5.8
January 5, 2018	1.7	2.2	3.5	5.7
January 6, 2018	1.9	1.9	3.4	5.3
January 7, 2018	1.7	1.7	3.8	5.5
January 8, 2018	1.3	2.0	3.0	5.0
January 9, 2018	1.4	1.4	3.1	4.5
January 10, 2018	1.4	1.5	3.2	4.7
January 11, 2018	0.3	2.1	2.1	4.1
January 12, 2018	2.0	2.4	3.1	5.5
January 13, 2018	1.7	1.9	3.9	5.8
January 14, 2018	1.1	1.3	2.8	4.1
January 15, 2018	1.4	1.9	3.2	5.1
January 16, 2018	1.8	1.9	3.3	5.2
January 17, 2018	1.6	1.1	3.4	4.5
January 18, 2018	1.9	2.8	4.2	7.0
January 19, 2018	1.9	2.4	4.0	6.4
January 20, 2018	1.7	2.3	3.4	5.7
January 21, 2018	1.9	2.3	4.2	6.5
January 22, 2018	2.1	2.4	4.2	6.5
January 23, 2018	1.7	2.3	3.6	5.9
January 24, 2018	1.4	1.8	3.4	5.2
January 25, 2018	1.2	1.7	3.0	4.7
January 26, 2018	1.5	1.5	3.4	4.9
January 27, 2018	2.0	2.0	3.6	5.6
January 28, 2018	1.7	1.8	3.5	5.2
January 29, 2018	1.5	1.9	3.5	5.4
January 30, 2018	1.4	2.0	2.9	4.9
January 31, 2018	1.4	1.8	3.4	5.2
January Total	**48.5**	**59.6**	**105.6**	**165.2**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
February 1, 2018	1.9	1.9	3.4	5.3
February 2, 2018	1.4	1.5	3.2	4.8
February 3, 2018	2.0	2.2	4.3	6.5
February 4, 2018	1.8	2.1	3.5	5.6
February 5, 2018	1.7	2.1	3.4	5.5
February 6, 2018	0.8	1.3	3.1	4.4
February 7, 2018	1.7	1.9	4.1	6.0
February 8, 2018	1.9	2.2	4.2	6.4
February 9, 2018	1.4	1.6	3.7	5.3
February 10, 2018	0.9	1.4	2.5	3.9
February 11, 2018	1.2	1.7	3.1	4.7
February 12, 2018	1.2	1.5	3.1	4.6
February 13, 2018	1.6	2.1	3.6	5.7
February 14, 2018	1.2	1.4	3.0	4.4
February 15, 2018	1.6	1.9	3.3	5.2
February 16, 2018	1.6	1.6	3.5	5.1
February 17, 2018	1.5	1.8	3.4	5.2
February 18, 2018	1.6	1.8	3.4	5.3
February 19, 2018	1.4	1.7	2.9	4.6
February 20, 2018	1.5	2.1	3.9	5.9
February 21, 2018	1.5	2.0	3.9	5.9
February 22, 2018	1.4	2.0	3.7	5.7
February 23, 2018	2.0	2.2	4.4	6.5
February 24, 2018	1.5	1.9	3.8	5.7
February 25, 2018	1.2	1.8	3.5	5.3
February 26, 2018	1.4	1.7	3.7	5.4
February 27, 2018	1.5	2.4	3.9	6.3
February 28, 2018	2.2	2.1	3.7	5.8
February 29, 2018 (if leap year)	0.0	0.0	0.0	0.0
February Total	**42.4**	**51.9**	**99.4**	**151.2**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
March 1, 2018	1.7	2.3	4.1	6.4
March 2, 2018	1.7	2.0	4.1	6.0
March 3, 2018	2.1	2.6	4.5	7.1
March 4, 2018	1.5	2.0	3.8	5.9
March 5, 2018	1.8	2.2	4.0	6.2
March 6, 2018	1.6	2.0	3.6	5.6
March 7, 2018	1.0	1.7	3.2	5.0
March 8, 2018	1.5	1.9	3.6	5.5
March 9, 2018	1.8	2.4	3.9	6.3
March 10, 2018	1.2	1.6	3.0	4.6
March 11, 2018	1.4	1.9	3.3	5.2
March 12, 2018	1.6	2.1	3.4	5.5
March 13, 2018	1.5	1.9	3.3	5.2
March 14, 2018	1.1	1.6	2.9	4.5
March 15, 2018	1.6	2.2	3.5	5.7
March 16, 2018	1.5	1.8	3.2	5.0
March 17, 2018	1.6	2.0	3.9	5.9
March 18, 2018	1.5	1.9	3.6	5.5
March 19, 2018	1.5	2.0	3.4	5.4
March 20, 2018	1.5	1.9	3.4	5.3
March 21, 2018	1.5	2.0	3.4	5.4
March 22, 2018	2.0	2.5	3.8	6.3
March 23, 2018	2.0	2.5	3.8	6.3
March 24, 2018	1.2	1.8	3.0	4.7
March 25, 2018	1.2	1.8	2.8	4.5
March 26, 2018	2.1	2.5	3.8	6.3
March 27, 2018	2.3	2.9	4.6	7.5
March 28, 2018	2.1	2.8	4.5	7.3
March 29, 2018	2.0	2.5	4.4	6.9
March 30, 2018	2.1	2.6	4.4	7.1
March 31, 2018	2.1	2.7	4.4	7.1
March Total	**51.4**	**66.6**	**114.7**	**181.3**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
April 1, 2018	2.1	2.7	3.9	6.6
April 2, 2018	2.0	2.5	3.9	6.4
April 3, 2018	1.5	2.1	3.4	5.5
April 4, 2018	1.5	2.0	3.4	5.4
April 5, 2018	1.8	2.3	4.2	6.5
April 6, 2018	1.8	1.9	3.6	5.5
April 7, 2018	1.4	2.2	3.1	5.4
April 8, 2018	1.8	1.9	3.6	5.4
April 9, 2018	1.9	2.2	3.6	5.8
April 10, 2018	2.2	2.9	4.0	7.0
April 11, 2018	1.7	2.2	3.4	5.6
April 12, 2018	1.7	1.9	3.4	5.3
April 13, 2018	1.8	2.1	3.6	5.8
April 14, 2018	1.7	1.9	3.5	5.4
April 15, 2018	1.4	1.8	3.0	4.8
April 16, 2018	2.1	2.6	3.8	6.4
April 17, 2018	1.0	1.6	2.8	4.5
April 18, 2018	2.1	2.6	3.7	6.4
April 19, 2018	2.1	2.7	4.1	6.8
April 20, 2018	2.0	2.3	4.4	6.6
April 21, 2018	2.1	2.7	3.6	6.3
April 22, 2018	1.5	2.2	3.3	5.4
April 23, 2018	1.5	2.1	3.4	5.5
April 24, 2018	1.6	2.0	3.3	5.3
April 25, 2018	1.9	2.5	3.7	6.2
April 26, 2018	1.4	1.9	3.2	5.0
April 27, 2018	1.8	2.4	3.1	5.4
April 28, 2018	1.5	2.0	2.1	4.1
April 29, 2018	1.5	2.1	2.2	4.3
April 30, 2018	1.9	2.5	3.6	6.1
April Total	**52.2**	**66.8**	**103.9**	**170.7**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
May 1, 2018	2.1	2.6	3.8	6.4
May 2, 2018	2.0	2.5	3.9	6.4
May 3, 2018	2.1	2.7	4.4	7.1
May 4, 2018	2.0	2.5	4.3	6.9
May 5, 2018	2.0	2.6	4.4	7.0
May 6, 2018	2.1	2.6	4.4	7.0
May 7, 2018	2.1	2.7	4.0	6.7
May 8, 2018	1.6	2.1	3.3	5.4
May 9, 2018	1.8	2.3	3.4	5.7
May 10, 2018	2.1	2.5	3.9	6.4
May 11, 2018	2.0	2.6	3.5	6.1
May 12, 2018	1.7	2.3	2.4	4.7
May 13, 2018	1.8	2.3	3.2	5.4
May 14, 2018	2.0	5.7	3.4	9.1
May 15, 2018	1.8	2.3	3.6	5.9
May 16, 2018	2.1	2.6	3.1	5.7
May 17, 2018	2.0	2.5	3.1	5.6
May 18, 2018	2.9	2.6	4.3	6.9
May 19, 2018	3.5	2.2	4.9	7.1
May 20, 2018	1.8	2.3	3.6	5.9
May 21, 2018	1.6	1.3	2.5	3.8
May 22, 2018	2.4	2.1	4.7	6.8
May 23, 2018	2.6	1.5	3.6	5.2
May 24, 2018	1.9	2.5	3.2	5.7
May 25, 2018	2.8	2.4	3.3	5.7
May 26, 2018	1.8	2.4	2.7	5.1
May 27, 2018	1.9	2.5	2.6	5.1
May 28, 2018	3.1	1.7	5.2	6.9
May 29, 2018	2.9	2.0	4.7	6.7
May 30, 2018	3.0	2.1	4.9	7.0
May 31, 2018	2.9	1.5	4.9	6.4
May Total	**68.1**	**74.8**	**117.2**	**191.9**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
June 1, 2018	3.4	2.5	5.7	8.3
June 2, 2018	2.6	1.3	5.2	6.4
June 3, 2018	2.6	0.3	4.8	5.2
June 4, 2018	2.7	0.9	4.5	5.4
June 5, 2018	2.7	1.1	3.1	4.2
June 6, 2018	2.7	0.5	3.7	4.1
June 7, 2018	2.6	0.4	4.5	4.9
June 8, 2018	2.6	0.1	4.2	4.4
June 9, 2018	2.0	0.4	2.6	3.0
June 10, 2018	1.7	0.0	4.4	4.4
June 11, 2018	0.4	1.4	4.3	5.7
June 12, 2018	0.8	0.6	4.5	5.2
June 13, 2018	1.2	1.1	4.6	5.7
June 14, 2018	2.7	0.7	5.0	5.7
June 15, 2018	1.8	0.0	4.6	4.6
June 16, 2018	2.2	0.0	4.1	4.1
June 17, 2018	2.5	0.6	5.1	5.7
June 18, 2018	2.2	0.7	4.1	4.8
June 19, 2018	1.3	1.4	6.7	8.0
June 20, 2018	1.2	1.4	3.7	5.1
June 21, 2018	2.6	1.7	2.6	4.2
June 22, 2018	1.5	2.5	2.8	5.3
June 23, 2018	1.4	1.5	2.9	4.4
June 24, 2018	1.1	2.3	3.6	5.9
June 25, 2018	0.9	1.7	3.2	5.0
June 26, 2018	0.8	1.1	6.3	7.3
June 27, 2018	1.4	2.2	4.6	6.7
June 28, 2018	2.2	1.2	4.4	5.6
June 29, 2018	1.9	0.5	4.5	5.0
June 30, 2018	1.7	0.5	4.4	4.9
June Total	**57.6**	**30.7**	**128.7**	**159.3**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
July 1, 2018	2.9	1.1	3.9	5.1
July 2, 2018	2.9	1.0	3.7	4.7
July 3, 2018	2.9	0.2	3.9	4.2
July 4, 2018	2.9	0.6	3.5	4.1
July 5, 2018	2.9	0.4	3.8	4.2
July 6, 2018	2.9	0.0	3.6	3.6
July 7, 2018	3.1	0.0	4.1	4.1
July 8, 2018	3.1	0.0	4.1	4.1
July 9, 2018	2.9	0.0	5.3	5.3
July 10, 2018	2.8	0.6	5.2	5.8
July 11, 2018	1.7	0.0	4.0	4.0
July 12, 2018	1.7	0.4	4.1	4.4
July 13, 2018	2.0	0.3	3.6	3.9
July 14, 2018	1.6	0.0	3.3	3.3
July 15, 2018	2.3	0.0	4.6	4.6
July 16, 2018	2.1	0.3	4.1	4.4
July 17, 2018	1.9	0.8	3.9	4.7
July 18, 2018	2.0	0.5	3.2	3.7
July 19, 2018	2.6	0.3	2.9	3.2
July 20, 2018	2.8	0.3	3.4	3.7
July 21, 2018	2.6	2.1	3.8	5.9
July 22, 2018	2.3	1.2	3.0	4.3
July 23, 2018	2.9	0.4	4.1	4.6
July 24, 2018	2.4	0.6	4.5	5.1
July 25, 2018	2.6	0.6	3.6	4.3
July 26, 2018	2.4	0.6	2.8	3.4
July 27, 2018	2.8	0.6	3.7	4.3
July 28, 2018	1.4	1.1	2.4	3.6
July 29, 2018	1.7	1.3	2.3	3.6
July 30, 2018	2.0	0.6	3.7	4.3
July 31, 2018	2.3	1.0	4.2	5.2
July Total	**75.3**	**17.3**	**116.3**	**133.6**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
August 1, 2018	2.5	0.5	3.6	4.0
August 2, 2018	2.4	1.2	3.3	4.5
August 3, 2018	2.3	1.9	4.4	6.4
August 4, 2018	2.7	1.3	4.1	5.4
August 5, 2018	2.0	1.2	3.2	4.4
August 6, 2018	2.6	1.4	3.5	4.8
August 7, 2018	2.2	2.0	4.5	6.5
August 8, 2018	3.2	1.8	4.4	6.2
August 9, 2018	1.8	2.1	3.0	5.1
August 10, 2018	1.8	2.1	2.6	4.7
August 11, 2018	2.5	1.6	3.9	5.5
August 12, 2018	1.7	0.5	4.0	4.5
August 13, 2018	1.8	0.3	4.0	4.3
August 14, 2018	1.3	2.1	3.5	5.5
August 15, 2018	1.7	0.2	3.5	3.8
August 16, 2018	2.2	1.6	4.1	5.6
August 17, 2018	2.1	0.7	4.3	5.0
August 18, 2018	2.1	1.5	4.0	5.5
August 19, 2018	1.6	0.6	3.2	3.8
August 20, 2018	2.2	1.8	4.0	5.8
August 21, 2018	2.0	2.0	4.0	6.0
August 22, 2018	2.5	1.0	4.8	5.8
August 23, 2018	2.2	2.0	3.5	5.6
August 24, 2018	2.7	2.1	3.4	5.5
August 25, 2018	2.1	2.3	2.9	5.2
August 26, 2018	2.0	2.6	3.1	5.8
August 27, 2018	2.4	2.0	4.2	6.1
August 28, 2018	2.0	1.8	3.1	4.9
August 29, 2018	2.5	2.0	4.8	6.8
August 30, 2018	3.0	2.5	4.8	7.3
August 31, 2018	2.2	2.7	4.1	6.8
August Total	**68.2**	**49.3**	**117.8**	**167.1**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
September 1, 2018	3.0	2.3	5.4	7.7
September 2, 2018	1.9	1.6	3.0	4.6
September 3, 2018	2.4	1.6	4.7	6.3
September 4, 2018	1.5	0.9	3.9	4.8
September 5, 2018	1.4	1.3	3.6	4.9
September 6, 2018	1.6	0.6	3.7	4.3
September 7, 2018	2.1	1.4	4.5	5.9
September 8, 2018	1.4	0.6	3.6	4.1
September 9, 2018	1.7	0.4	3.6	4.0
September 10, 2018	1.4	1.0	3.7	4.7
September 11, 2018	1.6	0.2	3.8	4.1
September 12, 2018	1.4	1.1	3.3	4.4
September 13, 2018	2.0	0.9	4.1	5.0
September 14, 2018	2.0	0.3	4.4	4.7
September 15, 2018	1.3	0.6	3.2	3.8
September 16, 2018	1.6	0.5	3.6	4.0
September 17, 2018	1.4	0.6	3.6	4.2
September 18, 2018	1.6	0.6	4.1	4.7
September 19, 2018	1.7	0.6	3.6	4.2
September 20, 2018	1.7	0.6	3.7	4.3
September 21, 2018	2.4	1.2	4.7	5.9
September 22, 2018	1.2	0.9	3.6	4.4
September 23, 2018	1.5	0.4	3.5	3.9
September 24, 2018	1.8	1.4	4.0	5.4
September 25, 2018	1.4	0.8	3.3	4.1
September 26, 2018	1.8	1.4	4.2	5.6
September 27, 2018	2.5	1.7	4.8	6.5
September 28, 2018	2.8	0.7	5.0	5.8
September 29, 2018	2.0	2.3	4.3	6.6
September 30, 2018	1.9	0.5	4.3	4.8
September Total	**54.1**	**28.9**	**118.8**	**147.8**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
October 1, 2018	1.9	1.0	3.8	4.7
October 2, 2018	1.3	1.9	3.2	5.1
October 3, 2018	1.5	0.9	3.4	4.3
October 4, 2018	1.4	2.1	2.2	4.4
October 5, 2018	1.2	2.5	3.5	6.0
October 6, 2018	1.1	2.5	2.7	5.2
October 7, 2018	1.5	2.5	3.5	6.0
October 8, 2018	2.0	2.1	3.8	5.8
October 9, 2018	1.4	1.4	3.8	5.2
October 10, 2018	1.4	2.3	3.0	5.3
October 11, 2018	1.3	2.0	3.0	5.0
October 12, 2018	0.9	2.8	3.3	6.1
October 13, 2018	0.3	2.2	2.7	4.9
October 14, 2018	1.2	2.5	3.6	6.1
October 15, 2018	0.8	2.5	3.2	5.6
October 16, 2018	0.0	2.7	2.4	5.1
October 17, 2018	1.0	2.3	3.4	5.6
October 18, 2018	1.2	2.4	3.4	5.8
October 19, 2018	0.9	2.2	3.3	5.4
October 20, 2018	0.0	2.5	2.4	4.8
October 21, 2018	1.2	2.5	3.3	5.8
October 22, 2018	1.3	2.5	3.2	5.7
October 23, 2018	1.9	2.5	3.8	6.3
October 24, 2018	1.5	2.9	3.8	6.7
October 25, 2018	1.7	2.1	4.1	6.2
October 26, 2018	0.7	2.5	3.1	5.6
October 27, 2018	0.3	2.3	2.5	4.9
October 28, 2018	1.9	2.6	4.0	6.6
October 29, 2018	0.8	2.6	2.9	5.6
October 30, 2018	0.0	2.4	2.4	4.8
October 31, 2018	0.3	1.3	2.7	4.0
October Total	**33.9**	**69.4**	**99.3**	**168.7**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
November 1, 2018	2.4	0.6	4.8	5.4
November 2, 2018	2.9	1.0	5.2	6.3
November 3, 2018	3.5	1.7	5.9	7.5
November 4, 2018	2.8	1.5	5.1	6.7
November 5, 2018	1.9	2.2	4.2	6.5
November 6, 2018	2.0	2.6	4.3	7.0
November 7, 2018	1.9	2.3	3.9	6.2
November 8, 2018	1.8	2.3	4.2	6.5
November 9, 2018	2.0	2.5	4.3	6.9
November 10, 2018	1.9	2.5	3.9	6.3
November 11, 2018	1.9	2.5	4.3	6.7
November 12, 2018	2.0	2.4	4.3	6.8
November 13, 2018	4.1	4.0	6.4	10.4
November 14, 2018	1.7	2.4	4.1	6.5
November 15, 2018	2.4	1.7	4.8	6.4
November 16, 2018	2.7	1.2	5.1	6.3
November 17, 2018	2.7	1.2	5.1	6.3
November 18, 2018	1.7	1.1	4.1	5.2
November 19, 2018	1.9	0.9	4.3	5.1
November 20, 2018	2.2	1.6	4.6	6.1
November 21, 2018	2.0	1.1	4.4	5.5
November 22, 2018	1.9	1.0	4.2	5.2
November 23, 2018	2.1	1.4	4.4	5.8
November 24, 2018	2.1	1.3	4.5	5.8
November 25, 2018	2.0	1.1	4.4	5.5
November 26, 2018	1.7	1.2	4.1	5.3
November 27, 2018	2.7	1.2	5.0	6.2
November 28, 2018	2.2	0.4	4.6	5.0
November 29, 2018	2.1	0.6	4.3	5.0
November 30, 2018	2.7	1.1	5.0	6.1
November Total	**67.9**	**48.7**	**137.9**	**186.6**

Table 1b - Basic Municipal Water Supply Source Data for Canton for 2018

(1b.1) Date	Municipal Water Supply by Source (Acre-Feet)			
	(1b.2) Originating from Mill Creek Lake w/o Return Flows	(1b.3) Originating from Groundwater	(1b.4) Originating from Mill Creek Lake With Return Flows	(1b.5) Total Municipal Supply With Return Flows
December 1, 2018	2.7	1.3	5.1	6.4
December 2, 2018	2.5	0.6	4.9	5.6
December 3, 2018	2.3	0.5	4.7	5.2
December 4, 2018	2.2	0.5	4.5	5.1
December 5, 2018	2.2	0.8	4.6	5.4
December 6, 2018	1.7	0.8	4.1	4.8
December 7, 2018	1.7	1.0	4.1	5.0
December 8, 2018	2.6	0.0	5.0	5.0
December 9, 2018	2.2	0.0	4.6	4.6
December 10, 2018	1.4	0.6	3.8	4.4
December 11, 2018	1.3	1.4	3.7	5.1
December 12, 2018	1.2	1.3	3.5	4.8
December 13, 2018	1.3	1.2	3.7	4.9
December 14, 2018	1.7	0.6	4.1	4.6
December 15, 2018	2.0	0.7	4.4	5.1
December 16, 2018	1.5	1.2	3.9	5.0
December 17, 2018	1.8	1.0	4.2	5.2
December 18, 2018	1.0	1.6	3.4	5.0
December 19, 2018	1.7	0.4	4.1	4.5
December 20, 2018	1.4	0.7	3.7	4.4
December 21, 2018	1.9	0.6	4.3	4.9
December 22, 2018	1.7	0.7	4.0	4.7
December 23, 2018	1.6	0.6	3.9	4.5
December 24, 2018	1.7	0.5	3.9	4.4
December 25, 2018	1.6	0.0	3.7	3.7
December 26, 2018	1.4	0.0	3.8	3.8
December 27, 2018	2.3	0.9	4.6	5.5
December 28, 2018	1.7	0.6	3.6	4.2
December 29, 2018	1.4	1.0	3.8	4.8
December 30, 2018	1.2	0.3	3.6	3.9
December 31, 2018	1.7	1.2	4.1	5.3
December Total	**54.8**	**22.6**	**127.2**	**149.8**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
January 2018	19	57	16	20	20	19	57
February 2018	25	77	20	26	31	23	69
March 2018	23	70	20	26	25	23	70
April 2018	17	53	16	20	16	17	53
May 2018	18	54	19	20	15	18	54
June 2018	15	45	20	10	15	15	45
July 2018	14	41	22	4	15	14	41
August 2018	16	50	20	13	16	16	50
September 2018	22	67	25	13	31	22	67
October 2018	29	89	15	35	36	26	81
November 2018	32	97	35	24	38	29	90
December 2018	35	107	37	15	56	31	95
2018 Total	**263**	**808**	**264**	**227**	**316**	**252**	**772**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
January 1, 2018	0.49	1.5	0.4	0.6	0.5	0.49	1.5
January 2, 2018	0.59	1.8	0.2	0.7	0.8	0.59	1.8
January 3, 2018	0.68	2.1	0.8	0.6	0.6	0.68	2.1
January 4, 2018	0.52	1.6	0.5	0.6	0.4	0.52	1.6
January 5, 2018	0.58	1.8	0.6	0.7	0.6	0.58	1.8
January 6, 2018	0.51	1.6	0.6	0.6	0.5	0.51	1.6
January 7, 2018	0.70	2.1	0.6	0.6	0.8	0.70	2.1
January 8, 2018	0.58	1.8	0.5	0.7	0.6	0.58	1.8
January 9, 2018	0.55	1.7	0.5	0.5	0.6	0.55	1.7
January 10, 2018	0.59	1.8	0.5	0.6	0.7	0.59	1.8
January 11, 2018	0.57	1.7	0.1	0.9	0.7	0.57	1.7
January 12, 2018	0.39	1.2	0.4	0.5	0.3	0.39	1.2
January 13, 2018	0.71	2.2	0.7	0.7	0.8	0.71	2.2
January 14, 2018	0.56	1.7	0.5	0.5	0.7	0.56	1.7
January 15, 2018	0.60	1.8	0.5	0.7	0.6	0.60	1.8
January 16, 2018	0.55	1.7	0.5	0.6	0.6	0.55	1.7
January 17, 2018	0.61	1.9	0.7	0.5	0.8	0.61	1.9
January 18, 2018	0.80	2.5	0.7	1.0	0.8	0.80	2.5
January 19, 2018	0.70	2.1	0.6	0.8	0.7	0.70	2.1
January 20, 2018	0.57	1.7	0.5	0.7	0.5	0.57	1.7
January 21, 2018	0.77	2.4	0.7	0.8	0.9	0.77	2.4
January 22, 2018	0.66	2.0	0.7	0.7	0.6	0.66	2.0
January 23, 2018	0.60	1.9	0.6	0.7	0.6	0.60	1.9
January 24, 2018	0.66	2.0	0.5	0.7	0.8	0.66	2.0
January 25, 2018	0.58	1.8	0.5	0.6	0.7	0.58	1.8
January 26, 2018	0.60	1.8	0.6	0.6	0.7	0.60	1.8
January 27, 2018	0.50	1.5	0.5	0.5	0.4	0.50	1.5
January 28, 2018	0.56	1.7	0.6	0.6	0.6	0.56	1.7
January 29, 2018	0.67	2.1	0.6	0.7	0.8	0.67	2.1
January 30, 2018	0.51	1.5	0.4	0.6	0.5	0.51	1.5
January 31, 2018	0.68	2.1	0.5	0.7	0.8	0.68	2.1
January Total	**18.61**	**57.1**	**16.5**	**20.5**	**20.1**	**18.61**	**57.1**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
February 1, 2018	0.50	1.5	0.5	0.5	0.4	0.50	1.5
February 2, 2018	0.62	1.9	0.5	0.6	0.8	0.62	1.9
February 3, 2018	0.78	2.4	0.7	0.8	0.9	0.78	2.4
February 4, 2018	0.56	1.7	0.5	0.6	0.5	0.56	1.7
February 5, 2018	0.58	1.8	0.5	0.7	0.6	0.58	1.8
February 6, 2018	1.69	5.2	0.8	1.3	3.1	1.30	4.0
February 7, 2018	0.89	2.7	0.8	0.8	1.1	0.89	2.7
February 8, 2018	0.74	2.3	0.7	0.8	0.8	0.74	2.3
February 9, 2018	0.76	2.3	0.6	0.7	1.0	0.76	2.3
February 10, 2018	0.54	1.7	0.4	0.6	0.7	0.54	1.7
February 11, 2018	0.59	1.8	0.5	0.6	0.7	0.59	1.8
February 12, 2018	0.61	1.9	0.5	0.6	0.8	0.61	1.9
February 13, 2018	0.66	2.0	0.6	0.7	0.7	0.66	2.0
February 14, 2018	0.60	1.8	0.5	0.6	0.7	0.60	1.8
February 15, 2018	0.57	1.7	0.5	0.6	0.6	0.57	1.7
February 16, 2018	0.63	1.9	0.6	0.6	0.7	0.63	1.9
February 17, 2018	0.60	1.9	0.6	0.7	0.7	0.60	1.9
February 18, 2018	0.61	1.9	0.6	0.7	0.7	0.61	1.9
February 19, 2018	0.47	1.4	0.4	0.5	0.4	0.47	1.4
February 20, 2018	2.19	6.7	1.5	2.1	3.1	1.30	4.0
February 21, 2018	1.96	6.0	1.5	2.0	2.5	1.30	4.0
February 22, 2018	1.92	5.9	1.4	2.0	2.6	1.30	4.0
February 23, 2018	1.27	3.9	1.2	1.3	1.4	1.27	3.9
February 24, 2018	1.35	4.1	1.1	1.4	1.7	1.30	4.0
February 25, 2018	0.98	3.0	0.7	1.0	1.3	0.98	3.0
February 26, 2018	0.87	2.7	0.7	0.9	1.2	0.87	2.7
February 27, 2018	1.20	3.7	0.9	1.4	1.4	1.20	3.7
February 28, 2018	0.47	1.5	0.6	0.5	0.4	0.47	1.5
February 29, 2018 (if leap year)		0.0	0.0	0.0	0.0		0.0
February Total	**25.20**	**77.3**	**20.2**	**25.6**	**31.4**	**22.59**	**69.3**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
March 1, 2018	1.23	3.8	1.0	1.4	1.4	1.23	3.8
March 2, 2018	1.00	3.1	0.9	1.0	1.2	1.00	3.1
March 3, 2018	0.93	2.9	0.9	1.1	1.0	0.93	2.9
March 4, 2018	0.84	2.6	0.7	0.9	1.0	0.84	2.6
March 5, 2018	0.71	2.2	0.6	0.8	0.8	0.71	2.2
March 6, 2018	0.68	2.1	0.6	0.7	0.8	0.68	2.1
March 7, 2018	0.71	2.2	0.5	0.8	1.0	0.71	2.2
March 8, 2018	0.68	2.1	0.6	0.7	0.8	0.68	2.1
March 9, 2018	0.68	2.1	0.6	0.8	0.7	0.68	2.1
March 10, 2018	0.58	1.8	0.5	0.6	0.7	0.58	1.8
March 11, 2018	0.61	1.9	0.5	0.7	0.7	0.61	1.9
March 12, 2018	0.59	1.8	0.5	0.7	0.6	0.59	1.8
March 13, 2018	0.61	1.9	0.5	0.7	0.7	0.61	1.9
March 14, 2018	0.61	1.9	0.5	0.7	0.8	0.61	1.9
March 15, 2018	0.60	1.8	0.5	0.7	0.6	0.60	1.8
March 16, 2018	0.55	1.7	0.5	0.6	0.6	0.55	1.7
March 17, 2018	0.91	2.8	0.7	0.9	1.1	0.91	2.8
March 18, 2018	0.69	2.1	0.6	0.7	0.8	0.69	2.1
March 19, 2018	0.61	1.9	0.5	0.7	0.7	0.61	1.9
March 20, 2018	0.62	1.9	0.6	0.7	0.7	0.62	1.9
March 21, 2018	0.63	1.9	0.5	0.7	0.7	0.63	1.9
March 22, 2018	0.59	1.8	0.6	0.7	0.5	0.59	1.8
March 23, 2018	0.58	1.8	0.6	0.7	0.5	0.58	1.8
March 24, 2018	0.57	1.8	0.5	0.7	0.7	0.57	1.8
March 25, 2018	0.51	1.6	0.4	0.6	0.6	0.51	1.6
March 26, 2018	0.54	1.7	0.6	0.7	0.4	0.54	1.7
March 27, 2018	0.89	2.7	0.8	1.0	0.8	0.89	2.7
March 28, 2018	1.49	4.6	1.4	1.7	1.5	1.30	4.0
March 29, 2018	0.99	3.0	0.9	1.1	1.0	0.99	3.0
March 30, 2018	0.88	2.7	0.8	1.0	0.9	0.88	2.7
March 31, 2018	0.83	2.5	0.7	0.9	0.8	0.83	2.5
March Total	**22.93**	**70.7**	**19.9**	**25.8**	**25.0**	**22.74**	**69.8**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
April 1, 2018	0.61	1.9	0.6	0.8	0.5	0.61	1.9
April 2, 2018	0.63	1.9	0.6	0.7	0.6	0.63	1.9
April 3, 2018	0.60	1.8	0.5	0.7	0.6	0.60	1.8
April 4, 2018	0.63	1.9	0.5	0.7	0.7	0.63	1.9
April 5, 2018	0.96	2.9	0.8	1.0	1.1	0.96	2.9
April 6, 2018	0.58	1.8	0.6	0.6	0.6	0.58	1.8
April 7, 2018	0.56	1.7	0.4	0.7	0.5	0.56	1.7
April 8, 2018	0.57	1.8	0.6	0.6	0.6	0.57	1.8
April 9, 2018	0.57	1.8	0.6	0.7	0.5	0.57	1.8
April 10, 2018	0.58	1.8	0.6	0.8	0.5	0.58	1.8
April 11, 2018	0.57	1.7	0.5	0.7	0.5	0.57	1.7
April 12, 2018	0.56	1.7	0.5	0.6	0.5	0.56	1.7
April 13, 2018	0.60	1.9	0.6	0.7	0.6	0.60	1.9
April 14, 2018	0.60	1.8	0.5	0.6	0.6	0.60	1.8
April 15, 2018	0.52	1.6	0.5	0.6	0.5	0.52	1.6
April 16, 2018	0.55	1.7	0.6	0.7	0.4	0.55	1.7
April 17, 2018	0.59	1.8	0.4	0.7	0.7	0.59	1.8
April 18, 2018	0.55	1.7	0.5	0.7	0.4	0.55	1.7
April 19, 2018	0.63	1.9	0.6	0.8	0.5	0.63	1.9
April 20, 2018	0.93	2.9	0.9	1.0	1.0	0.93	2.9
April 21, 2018	0.49	1.5	0.5	0.6	0.4	0.49	1.5
April 22, 2018	0.57	1.8	0.5	0.7	0.6	0.57	1.8
April 23, 2018	0.61	1.9	0.5	0.7	0.6	0.61	1.9
April 24, 2018	0.56	1.7	0.5	0.6	0.5	0.56	1.7
April 25, 2018	0.59	1.8	0.6	0.7	0.5	0.59	1.8
April 26, 2018	0.60	1.8	0.5	0.7	0.7	0.60	1.8
April 27, 2018	0.41	1.3	0.4	0.6	0.3	0.41	1.3
April 28, 2018	0.21	0.7	0.3	0.3	0.1	0.21	0.7
April 29, 2018	0.21	0.6	0.2	0.3	0.1	0.21	0.6
April 30, 2018	0.57	1.7	0.5	0.7	0.5	0.57	1.7
April Total	**17.18**	**52.80**	**16.0**	**20.4**	**16.5**	**17.18**	**52.73**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
May 1, 2018	0.56	1.7	0.5	0.7	0.5	0.56	1.7
May 2, 2018	0.61	1.9	0.6	0.8	0.6	0.61	1.9
May 3, 2018	1.15	3.5	1.0	1.3	1.2	1.15	3.5
May 4, 2018	1.43	4.4	1.3	1.6	1.5	1.30	4.0
May 5, 2018	1.00	3.1	0.9	1.2	1.0	1.00	3.1
May 6, 2018	0.75	2.3	0.7	0.9	0.8	0.75	2.3
May 7, 2018	0.61	1.9	0.6	0.8	0.5	0.61	1.9
May 8, 2018	0.57	1.7	0.5	0.7	0.5	0.57	1.7
May 9, 2018	0.53	1.6	0.5	0.6	0.5	0.53	1.6
May 10, 2018	0.60	1.8	0.6	0.7	0.5	0.60	1.8
May 11, 2018	0.50	1.5	0.5	0.6	0.4	0.50	1.5
May 12, 2018	0.21	0.7	0.3	0.3	0.1	0.21	0.7
May 13, 2018	0.45	1.4	0.5	0.6	0.4	0.45	1.4
May 14, 2018	0.46	1.4	0.3	0.9	0.2	0.46	1.4
May 15, 2018	0.57	1.7	0.5	0.7	0.5	0.57	1.7
May 16, 2018	0.34	1.0	0.4	0.5	0.2	0.34	1.0
May 17, 2018	0.35	1.1	0.4	0.5	0.2	0.35	1.1
May 18, 2018	0.45	1.4	0.6	0.5	0.3	0.45	1.4
May 19, 2018	0.46	1.4	0.7	0.4	0.3	0.46	1.4
May 20, 2018	0.57	1.8	0.6	0.7	0.5	0.57	1.8
May 21, 2018	0.29	0.9	0.4	0.3	0.2	0.29	0.9
May 22, 2018	1.20	3.7	1.3	1.1	1.3	1.20	3.7
May 23, 2018	0.33	1.0	0.5	0.3	0.2	0.33	1.0
May 24, 2018	0.43	1.3	0.4	0.6	0.3	0.43	1.3
May 25, 2018	0.17	0.5	0.2	0.2	0.0	0.17	0.5
May 26, 2018	0.28	0.9	0.3	0.4	0.2	0.28	0.9
May 27, 2018	0.24	0.7	0.3	0.3	0.1	0.24	0.7
May 28, 2018	0.69	2.1	0.9	0.5	0.6	0.69	2.1
May 29, 2018	0.57	1.7	0.7	0.5	0.4	0.57	1.7
May 30, 2018	0.64	2.0	0.8	0.6	0.6	0.64	2.0
May 31, 2018	0.66	2.0	0.9	0.5	0.6	0.66	2.0
May Total	**17.67**	**54.1**	**18.6**	**20.3**	**15.1**	**17.55**	**53.8**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
June 1, 2018	0.99	3.0	1.2	0.9	0.9	0.99	3.0
June 2, 2018	0.69	2.1	0.9	0.6	0.6	0.69	2.1
June 3, 2018	0.70	2.1	0.9	0.3	0.9	0.70	2.1
June 4, 2018	0.60	1.8	0.8	0.5	0.5	0.60	1.8
June 5, 2018	0.54	1.7	0.5	0.7	0.5	0.54	1.7
June 6, 2018	0.53	1.6	0.5	0.5	0.6	0.53	1.6
June 7, 2018	0.31	1.0	0.5	0.3	0.1	0.31	1.0
June 8, 2018	0.30	0.9	0.5	0.1	0.3	0.30	0.9
June 9, 2018	0.22	0.7	0.3	0.3	0.1	0.22	0.7
June 10, 2018	0.28	0.9	0.5	0.0	0.4	0.28	0.9
June 11, 2018	0.27	0.8	0.4	0.2	0.2	0.27	0.8
June 12, 2018	0.65	2.0	0.8	0.5	0.7	0.65	2.0
June 13, 2018	0.39	1.2	0.6	0.4	0.2	0.39	1.2
June 14, 2018	0.64	2.0	0.9	0.5	0.6	0.64	2.0
June 15, 2018	0.54	1.7	0.8	0.0	0.9	0.54	1.7
June 16, 2018	0.57	1.7	0.7	0.0	1.0	0.57	1.7
June 17, 2018	0.92	2.8	1.1	0.6	1.1	0.92	2.8
June 18, 2018	0.26	0.8	0.5	0.1	0.1	0.26	0.8
June 19, 2018	0.75	2.3	1.2	0.5	0.6	0.75	2.3
June 20, 2018	0.69	2.1	0.6	0.8	0.8	0.69	2.1
June 21, 2018	0.27	0.8	0.3	0.4	0.1	0.27	0.8
June 22, 2018	0.25	0.8	0.4	0.2	0.2	0.25	0.8
June 23, 2018	0.28	0.9	0.5	0.2	0.2	0.28	0.9
June 24, 2018	0.30	0.9	0.5	0.3	0.2	0.30	0.9
June 25, 2018	0.26	0.8	0.5	0.2	0.2	0.26	0.8
June 26, 2018	0.86	2.6	0.8	0.5	1.3	0.86	2.6
June 27, 2018	0.13	0.4	0.3	0.1	0.0	0.13	0.4
June 28, 2018	0.49	1.5	0.9	0.2	0.4	0.49	1.5
June 29, 2018	0.51	1.6	0.8	0.3	0.5	0.51	1.6
June 30, 2018	0.49	1.5	0.8	0.3	0.4	0.49	1.5
June Total	**14.66**	**45.0**	**19.8**	**10.5**	**14.7**	**14.66**	**45.0**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
July 1, 2018	0.34	1.0	0.6	0.2	0.2	0.34	1.0
July 2, 2018	0.24	0.7	0.4	0.2	0.1	0.24	0.7
July 3, 2018	0.36	1.1	0.7	0.1	0.3	0.36	1.1
July 4, 2018	0.19	0.6	0.4	0.1	0.1	0.19	0.6
July 5, 2018	0.28	0.9	0.6	0.1	0.2	0.28	0.9
July 6, 2018	0.23	0.7	0.6	0.0	0.1	0.23	0.7
July 7, 2018	0.33	1.0	0.7	0.0	0.3	0.33	1.0
July 8, 2018	0.33	1.0	0.8	0.0	0.2	0.33	1.0
July 9, 2018	0.76	2.3	1.3	0.0	1.0	0.76	2.3
July 10, 2018	0.84	2.6	1.3	0.3	1.1	0.84	2.6
July 11, 2018	0.73	2.2	1.0	0.0	1.2	0.73	2.2
July 12, 2018	0.76	2.3	0.9	0.2	1.2	0.76	2.3
July 13, 2018	0.52	1.6	0.8	0.1	0.7	0.52	1.6
July 14, 2018	0.54	1.7	0.8	0.0	0.9	0.54	1.7
July 15, 2018	0.84	2.6	1.3	0.0	1.3	0.84	2.6
July 16, 2018	0.66	2.0	1.0	0.1	0.9	0.66	2.0
July 17, 2018	0.65	2.0	0.8	0.4	0.8	0.65	2.0
July 18, 2018	0.40	1.2	0.6	0.2	0.4	0.40	1.2
July 19, 2018	0.09	0.3	0.2	0.0	0.0	0.09	0.3
July 20, 2018	0.22	0.7	0.5	0.1	0.1	0.22	0.7
July 21, 2018	0.41	1.3	0.6	0.5	0.3	0.41	1.3
July 22, 2018	0.24	0.7	0.4	0.2	0.1	0.24	0.7
July 23, 2018	0.41	1.3	0.8	0.1	0.4	0.41	1.3
July 24, 2018	0.67	2.1	1.0	0.3	0.8	0.67	2.1
July 25, 2018	0.32	1.0	0.6	0.2	0.2	0.32	1.0
July 26, 2018	0.13	0.4	0.3	0.1	0.0	0.13	0.4
July 27, 2018	0.28	0.8	0.5	0.1	0.2	0.28	0.8
July 28, 2018	0.34	1.0	0.4	0.3	0.3	0.34	1.0
July 29, 2018	0.19	0.6	0.3	0.2	0.1	0.19	0.6
July 30, 2018	0.57	1.8	0.8	0.3	0.7	0.57	1.8
July 31, 2018	0.63	1.9	0.8	0.4	0.7	0.63	1.9
July Total	**13.50**	**41.4**	**21.9**	**4.5**	**15.1**	**13.50**	**41.4**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
August 1, 2018	0.34	1.0	0.6	0.1	0.3	0.34	1.0
August 2, 2018	0.31	0.9	0.5	0.2	0.2	0.31	0.9
August 3, 2018	0.70	2.1	0.8	0.6	0.7	0.70	2.1
August 4, 2018	0.47	1.5	0.7	0.4	0.4	0.47	1.5
August 5, 2018	0.39	1.2	0.5	0.3	0.3	0.39	1.2
August 6, 2018	0.30	0.9	0.5	0.3	0.2	0.30	0.9
August 7, 2018	0.82	2.5	0.8	0.8	0.9	0.82	2.5
August 8, 2018	0.40	1.2	0.6	0.3	0.2	0.40	1.2
August 9, 2018	0.39	1.2	0.4	0.5	0.3	0.39	1.2
August 10, 2018	0.24	0.7	0.3	0.3	0.1	0.24	0.7
August 11, 2018	0.48	1.5	0.7	0.4	0.4	0.48	1.5
August 12, 2018	0.83	2.5	0.9	0.3	1.3	0.83	2.5
August 13, 2018	0.72	2.2	0.9	0.2	1.1	0.72	2.2
August 14, 2018	0.72	2.2	0.5	0.8	0.9	0.72	2.2
August 15, 2018	0.62	1.9	0.8	0.1	0.9	0.62	1.9
August 16, 2018	0.60	1.8	0.7	0.5	0.6	0.60	1.8
August 17, 2018	0.69	2.1	0.9	0.3	0.9	0.69	2.1
August 18, 2018	0.59	1.8	0.7	0.5	0.6	0.59	1.8
August 19, 2018	0.52	1.6	0.7	0.3	0.7	0.52	1.6
August 20, 2018	0.56	1.7	0.7	0.5	0.5	0.56	1.7
August 21, 2018	0.65	2.0	0.7	0.7	0.7	0.65	2.0
August 22, 2018	0.77	2.4	1.0	0.4	1.0	0.77	2.4
August 23, 2018	0.44	1.4	0.5	0.5	0.3	0.44	1.4
August 24, 2018	0.24	0.7	0.3	0.3	0.1	0.24	0.7
August 25, 2018	0.24	0.7	0.3	0.3	0.1	0.24	0.7
August 26, 2018	0.38	1.2	0.4	0.5	0.2	0.38	1.2
August 27, 2018	0.57	1.7	0.7	0.5	0.5	0.57	1.7
August 28, 2018	0.34	1.0	0.4	0.4	0.2	0.34	1.0
August 29, 2018	0.75	2.3	0.8	0.7	0.8	0.75	2.3
August 30, 2018	0.57	1.8	0.8	0.6	0.4	0.57	1.8
August 31, 2018	0.63	1.9	0.6	0.7	0.5	0.63	1.9
August Total	16.26	**49.6**	**19.8**	**13.4**	**16.4**	**16.26**	**49.9**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
September 1, 2018	0.88	2.7	1.1	0.8	0.8	0.88	2.7
September 2, 2018	0.37	1.1	0.5	0.4	0.3	0.37	1.1
September 3, 2018	0.75	2.3	0.9	0.6	0.8	0.75	2.3
September 4, 2018	0.83	2.6	0.8	0.5	1.3	0.83	2.6
September 5, 2018	0.71	2.2	0.6	0.6	1.0	0.71	2.2
September 6, 2018	0.71	2.2	0.8	0.3	1.1	0.71	2.2
September 7, 2018	0.89	2.7	1.0	0.7	1.1	0.89	2.7
September 8, 2018	0.69	2.1	0.7	0.3	1.1	0.69	2.1
September 9, 2018	0.64	2.0	0.8	0.2	1.0	0.64	2.0
September 10, 2018	0.78	2.4	0.7	0.5	1.2	0.78	2.4
September 11, 2018	0.74	2.3	0.9	0.1	1.3	0.74	2.3
September 12, 2018	0.61	1.9	0.6	0.5	0.8	0.61	1.9
September 13, 2018	0.71	2.2	0.9	0.4	1.0	0.71	2.2
September 14, 2018	0.78	2.4	1.0	0.2	1.2	0.78	2.4
September 15, 2018	0.64	2.0	0.7	0.3	1.0	0.64	2.0
September 16, 2018	0.65	2.0	0.8	0.2	1.0	0.65	2.0
September 17, 2018	0.71	2.2	0.8	0.3	1.1	0.71	2.2
September 18, 2018	0.74	2.3	0.9	0.3	1.1	0.74	2.3
September 19, 2018	0.64	2.0	0.8	0.3	0.9	0.64	2.0
September 20, 2018	0.64	2.0	0.8	0.3	0.9	0.64	2.0
September 21, 2018	0.87	2.7	1.1	0.5	1.1	0.87	2.7
September 22, 2018	1.04	3.2	0.9	0.6	1.7	1.04	3.2
September 23, 2018	0.67	2.1	0.8	0.2	1.1	0.67	2.1
September 24, 2018	0.69	2.1	0.7	0.6	0.8	0.69	2.1
September 25, 2018	0.62	1.9	0.7	0.4	0.9	0.62	1.9
September 26, 2018	0.87	2.7	0.9	0.7	1.1	0.87	2.7
September 27, 2018	0.74	2.3	0.9	0.6	0.8	0.74	2.3
September 28, 2018	0.74	2.3	1.1	0.3	0.9	0.74	2.3
September 29, 2018	0.80	2.4	0.7	0.8	0.9	0.80	2.4
September 30, 2018	0.80	2.5	1.0	0.3	1.2	0.80	2.5
September Total	**21.95**	**67.8**	**24.6**	**12.6**	**30.6**	**21.95**	**67.4**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
October 1, 2018	0.62	1.9	0.8	0.4	0.8	0.62	1.9
October 2, 2018	0.62	1.9	0.5	0.7	0.7	0.62	1.9
October 3, 2018	0.61	1.9	0.7	0.4	0.8	0.61	1.9
October 4, 2018	0.28	1.9	0.6	0.9	0.4	0.28	0.9
October 5, 2018	1.05	0.9	0.2	0.4	0.4	1.05	3.2
October 6, 2018	0.52	3.2	0.7	1.6	1.0	0.52	1.6
October 7, 2018	0.65	1.6	0.4	0.7	0.5	0.65	2.0
October 8, 2018	0.58	2.0	0.7	0.7	0.6	0.58	1.8
October 9, 2018	0.88	1.8	0.5	0.5	0.8	0.88	2.7
October 10, 2018	0.51	2.7	0.7	1.2	0.8	0.51	1.6
October 11, 2018	0.54	1.6	0.4	0.6	0.5	0.54	1.7
October 12, 2018	0.78	1.7	0.3	0.8	0.7	0.78	2.4
October 13, 2018	1.19	2.4	0.2	1.1	1.2	1.19	3.7
October 14, 2018	2.04	3.7	0.7	1.5	1.4	1.30	4.0
October 15, 2018	2.25	6.3	0.8	2.5	3.0	1.30	4.0
October 16, 2018	1.28	6.9	0.0	2.7	4.2	1.28	3.9
October 17, 2018	1.12	3.9	0.7	1.6	1.6	1.12	3.4
October 18, 2018	0.71	3.4	0.7	1.4	1.3	0.71	2.2
October 19, 2018	1.51	2.2	0.4	0.9	1.0	1.30	4.0
October 20, 2018	0.80	4.6	0.0	2.4	2.2	0.80	2.4
October 21, 2018	0.68	2.4	0.5	1.0	0.9	0.68	2.1
October 22, 2018	0.65	2.1	0.5	0.9	0.7	0.65	2.0
October 23, 2018	0.64	2.0	0.6	0.8	0.6	0.64	2.0
October 24, 2018	1.89	2.0	0.4	0.9	0.7	1.30	4.0
October 25, 2018	1.17	5.8	1.6	1.9	2.2	1.17	3.6
October 26, 2018	0.86	3.6	0.5	1.6	1.5	0.86	2.6
October 27, 2018	0.74	2.6	0.1	1.2	1.2	0.74	2.3
October 28, 2018	0.70	2.3	0.7	0.9	0.7	0.70	2.1
October 29, 2018	0.69	2.1	0.3	1.0	0.8	0.69	2.1
October 30, 2018	1.04	2.1	0.0	1.1	1.0	1.04	3.2
October 31, 2018	1.25	3.2	0.2	1.0	1.9	1.25	3.8
October Total	**28.85**	**86.7**	**15.3**	**35.2**	**36.2**	**26.36**	**80.9**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
November 1, 2018	2.44	7.5	2.4	0.6	4.4	1.30	4.0
November 2, 2018	1.29	4.0	1.8	0.7	1.5	1.29	4.0
November 3, 2018	1.40	4.3	2.0	1.0	1.3	1.30	4.0
November 4, 2018	1.79	5.5	2.3	1.3	2.0	1.30	4.0
November 5, 2018	0.98	3.0	0.9	1.0	1.1	0.98	3.0
November 6, 2018	0.80	2.5	0.7	0.9	0.8	0.80	2.5
November 7, 2018	0.66	2.0	0.6	0.7	0.7	0.66	2.0
November 8, 2018	1.20	3.7	1.0	1.3	1.3	1.20	3.7
November 9, 2018	1.11	3.4	1.0	1.3	1.2	1.11	3.4
November 10, 2018	0.64	2.0	0.6	0.8	0.6	0.64	2.0
November 11, 2018	1.75	5.4	1.5	2.0	1.9	1.30	4.0
November 12, 2018	1.40	4.3	1.3	1.5	1.5	1.30	4.0
November 13, 2018	0.95	2.9	1.1	1.1	0.7	0.95	2.9
November 14, 2018	1.09	3.3	0.9	1.2	1.2	1.09	3.3
November 15, 2018	0.90	2.8	1.1	0.7	1.0	0.90	2.8
November 16, 2018	0.98	3.0	1.3	0.6	1.1	0.98	3.0
November 17, 2018	0.83	2.5	1.1	0.5	0.9	0.83	2.5
November 18, 2018	0.95	2.9	0.9	0.6	1.3	0.95	2.9
November 19, 2018	0.98	3.0	1.1	0.5	1.4	0.98	3.0
November 20, 2018	1.01	3.1	1.1	0.8	1.2	1.01	3.1
November 21, 2018	0.92	2.8	1.0	0.6	1.2	0.92	2.8
November 22, 2018	0.82	2.5	0.9	0.5	1.1	0.82	2.5
November 23, 2018	0.84	2.6	0.9	0.6	1.1	0.84	2.6
November 24, 2018	0.80	2.4	0.9	0.5	1.0	0.80	2.4
November 25, 2018	0.78	2.4	0.9	0.5	1.0	0.78	2.4
November 26, 2018	0.98	3.0	1.0	0.7	1.3	0.98	3.0
November 27, 2018	0.78	2.4	1.0	0.5	0.9	0.78	2.4
November 28, 2018	0.79	2.4	1.1	0.2	1.1	0.79	2.4
November 29, 2018	0.73	2.2	0.9	0.3	1.0	0.73	2.2
November 30, 2018	0.99	3.0	1.3	0.5	1.2	0.99	3.0
November Total	**31.57**	**96.8**	**34.7**	**24.0**	**38.1**	**29.29**	**89.9**

Table 2a - Wastewater Discharge by Source for Canton for 2018 - Outfall 001

(2.1) Date	Total Outfall 1 Discharge		Source of Discharge (Acre-Feet)			Amount of Outfall 1 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
December 1, 2018	1.56	4.8	2.0	1.0	1.8	1.30	4.0
December 2, 2018	0.97	3.0	1.4	0.3	1.3	0.97	3.0
December 3, 2018	0.88	2.7	1.2	0.3	1.2	0.88	2.7
December 4, 2018	0.94	2.9	1.2	0.3	1.4	0.94	2.9
December 5, 2018	0.84	2.6	1.1	0.4	1.1	0.84	2.6
December 6, 2018	1.39	4.3	1.5	0.7	2.1	1.30	4.0
December 7, 2018	3.01	9.2	1.7	1.0	6.5	1.30	4.0
December 8, 2018	1.61	5.0	2.6	0.0	2.4	1.30	4.0
December 9, 2018	1.06	3.2	1.5	0.0	1.7	1.06	3.2
December 10, 2018	0.84	2.6	0.9	0.3	1.4	0.84	2.6
December 11, 2018	0.83	2.5	0.6	0.7	1.2	0.83	2.5
December 12, 2018	0.85	2.6	0.6	0.7	1.3	0.85	2.6
December 13, 2018	1.05	3.2	0.9	0.8	1.5	1.05	3.2
December 14, 2018	1.00	3.1	1.1	0.4	1.6	1.00	3.1
December 15, 2018	1.02	3.1	1.2	0.4	1.4	1.02	3.1
December 16, 2018	1.00	3.1	0.9	0.7	1.5	1.00	3.1
December 17, 2018	0.97	3.0	1.1	0.6	1.4	0.97	3.0
December 18, 2018	1.06	3.2	0.6	1.0	1.5	1.06	3.2
December 19, 2018	0.96	2.9	1.1	0.3	1.5	0.96	2.9
December 20, 2018	0.89	2.7	0.8	0.4	1.4	0.89	2.7
December 21, 2018	0.89	2.7	1.0	0.4	1.3	0.89	2.7
December 22, 2018	0.81	2.5	0.9	0.4	1.3	0.81	2.5
December 23, 2018	0.78	2.4	0.8	0.3	1.3	0.78	2.4
December 24, 2018	0.70	2.1	0.8	0.2	1.0	0.70	2.1
December 25, 2018	0.68	2.1	0.9	0.0	1.2	0.68	2.1
December 26, 2018	2.27	7.0	1.4	0.0	5.6	1.30	4.0
December 27, 2018	1.56	4.8	2.0	0.8	2.1	1.30	4.0
December 28, 2018	0.62	1.9	0.8	0.3	0.9	0.62	1.9
December 29, 2018	0.92	2.8	0.8	0.6	1.4	0.92	2.8
December 30, 2018	1.57	4.8	1.2	0.3	3.2	1.30	4.0
December 31, 2018	1.49	4.6	1.5	1.0	2.1	1.30	4.0
December Total	**34.98**	**107.4**	**36.5**	**14.6**	**56.3**	**30.92**	**94.9**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
January 2018	19	57	16	20	20	0	0
February 2018	19	57	16	20	22	0	0
March 2018	21	63	18	23	23	0	0
April 2018	17	52	16	20	16	0	0
May 2018	16	49	17	19	13	0	0
June 2018	14	44	19	10	14	0	0
July 2018	13	41	22	4	15	0	0
August 2018	16	50	20	13	16	0	0
September 2018	21	65	24	12	30	0	0
October 2018	21	65	13	27	26	0	0
November 2018	23	70	26	18	27	0	0
December 2018	24	72	27	11	36	0	0
2018 Total	**223**	**685**	**233**	**198**	**258**	**0**	**0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
January 1, 2018	0.49	1.5	0.4	0.6	0.5	0.00	0.0
January 2, 2018	0.59	1.8	0.2	0.7	0.8	0.00	0.0
January 3, 2018	0.68	2.1	0.8	0.6	0.6	0.00	0.0
January 4, 2018	0.52	1.6	0.5	0.6	0.4	0.00	0.0
January 5, 2018	0.58	1.8	0.6	0.7	0.6	0.00	0.0
January 6, 2018	0.51	1.6	0.6	0.6	0.5	0.00	0.0
January 7, 2018	0.70	2.1	0.6	0.6	0.8	0.00	0.0
January 8, 2018	0.58	1.8	0.5	0.7	0.6	0.00	0.0
January 9, 2018	0.55	1.7	0.5	0.5	0.6	0.00	0.0
January 10, 2018	0.59	1.8	0.5	0.6	0.7	0.00	0.0
January 11, 2018	0.57	1.7	0.1	0.9	0.7	0.00	0.0
January 12, 2018	0.39	1.2	0.4	0.5	0.3	0.00	0.0
January 13, 2018	0.71	2.2	0.7	0.7	0.8	0.00	0.0
January 14, 2018	0.56	1.7	0.5	0.5	0.7	0.00	0.0
January 15, 2018	0.60	1.8	0.5	0.7	0.6	0.00	0.0
January 16, 2018	0.55	1.7	0.5	0.6	0.6	0.00	0.0
January 17, 2018	0.61	1.9	0.7	0.5	0.8	0.00	0.0
January 18, 2018	0.77	2.4	0.6	0.9	0.8	0.00	0.0
January 19, 2018	0.70	2.1	0.6	0.8	0.7	0.00	0.0
January 20, 2018	0.57	1.7	0.5	0.7	0.5	0.00	0.0
January 21, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
January 22, 2018	0.66	2.0	0.7	0.7	0.6	0.00	0.0
January 23, 2018	0.60	1.9	0.6	0.7	0.6	0.00	0.0
January 24, 2018	0.66	2.0	0.5	0.7	0.8	0.00	0.0
January 25, 2018	0.58	1.8	0.5	0.6	0.7	0.00	0.0
January 26, 2018	0.60	1.8	0.6	0.6	0.7	0.00	0.0
January 27, 2018	0.50	1.5	0.5	0.5	0.4	0.00	0.0
January 28, 2018	0.56	1.7	0.6	0.6	0.6	0.00	0.0
January 29, 2018	0.67	2.1	0.6	0.7	0.8	0.00	0.0
January 30, 2018	0.51	1.5	0.4	0.6	0.5	0.00	0.0
January 31, 2018	0.68	2.1	0.5	0.7	0.8	0.00	0.0
January Total	**18.58**	**57.0**	**16.5**	**20.5**	**20.1**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
February 1, 2018	0.50	1.5	0.5	0.5	0.4	0.00	0.0
February 2, 2018	0.62	1.9	0.5	0.6	0.8	0.00	0.0
February 3, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
February 4, 2018	0.56	1.7	0.5	0.6	0.5	0.00	0.0
February 5, 2018	0.58	1.8	0.5	0.7	0.6	0.00	0.0
February 6, 2018	0.77	2.4	0.4	0.7	1.3	0.00	0.0
February 7, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
February 8, 2018	0.74	2.3	0.7	0.8	0.8	0.00	0.0
February 9, 2018	0.76	2.3	0.6	0.7	1.0	0.00	0.0
February 10, 2018	0.54	1.7	0.4	0.6	0.7	0.00	0.0
February 11, 2018	0.59	1.8	0.5	0.6	0.7	0.00	0.0
February 12, 2018	0.61	1.9	0.5	0.6	0.8	0.00	0.0
February 13, 2018	0.66	2.0	0.6	0.7	0.7	0.00	0.0
February 14, 2018	0.60	1.8	0.5	0.6	0.7	0.00	0.0
February 15, 2018	0.57	1.7	0.5	0.6	0.6	0.00	0.0
February 16, 2018	0.63	1.9	0.6	0.6	0.7	0.00	0.0
February 17, 2018	0.60	1.9	0.6	0.7	0.7	0.00	0.0
February 18, 2018	0.61	1.9	0.6	0.7	0.7	0.00	0.0
February 19, 2018	0.47	1.4	0.4	0.5	0.4	0.00	0.0
February 20, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
February 21, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
February 22, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
February 23, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
February 24, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
February 25, 2018	0.77	2.4	0.5	0.8	1.1	0.00	0.0
February 26, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
February 27, 2018	0.77	2.4	0.6	0.9	0.9	0.00	0.0
February 28, 2018	0.47	1.5	0.6	0.5	0.4	0.00	0.0
February 29, 2018 (if leap year)							
February Total	**18.58**	**57.4**	**15.8**	**19.6**	**22.1**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
March 1, 2018	0.77	2.4	0.7	0.9	0.9	0.00	0.0
March 2, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
March 3, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March 4, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
March 5, 2018	0.71	2.2	0.6	0.8	0.8	0.00	0.0
March 6, 2018	0.68	2.1	0.6	0.7	0.8	0.00	0.0
March 7, 2018	0.71	2.2	0.5	0.8	1.0	0.00	0.0
March 8, 2018	0.68	2.1	0.6	0.7	0.8	0.00	0.0
March 9, 2018	0.68	2.1	0.6	0.8	0.7	0.00	0.0
March 10, 2018	0.58	1.8	0.5	0.6	0.7	0.00	0.0
March 11, 2018	0.61	1.9	0.5	0.7	0.7	0.00	0.0
March 12, 2018	0.59	1.8	0.5	0.7	0.6	0.00	0.0
March 13, 2018	0.61	1.9	0.5	0.7	0.7	0.00	0.0
March 14, 2018	0.61	1.9	0.5	0.7	0.8	0.00	0.0
March 15, 2018	0.60	1.8	0.5	0.7	0.6	0.00	0.0
March 16, 2018	0.55	1.7	0.5	0.6	0.6	0.00	0.0
March 17, 2018	0.77	2.4	0.6	0.8	1.0	0.00	0.0
March 18, 2018	0.69	2.1	0.6	0.7	0.8	0.00	0.0
March 19, 2018	0.61	1.9	0.5	0.7	0.7	0.00	0.0
March 20, 2018	0.62	1.9	0.6	0.7	0.7	0.00	0.0
March 21, 2018	0.63	1.9	0.5	0.7	0.7	0.00	0.0
March 22, 2018	0.59	1.8	0.6	0.7	0.5	0.00	0.0
March 23, 2018	0.58	1.8	0.6	0.7	0.5	0.00	0.0
March 24, 2018	0.57	1.8	0.5	0.7	0.7	0.00	0.0
March 25, 2018	0.51	1.6	0.4	0.6	0.6	0.00	0.0
March 26, 2018	0.54	1.7	0.6	0.7	0.4	0.00	0.0
March 27, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March 28, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March 29, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March 30, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March 31, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
March Total	**20.64**	**64.0**	**18.0**	**23.4**	**22.6**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
April 1, 2018	0.61	1.9	0.6	0.8	0.5	0.00	0.0
April 2, 2018	0.63	1.9	0.6	0.7	0.6	0.00	0.0
April 3, 2018	0.60	1.8	0.5	0.7	0.6	0.00	0.0
April 4, 2018	0.63	1.9	0.5	0.7	0.7	0.00	0.0
April 5, 2018	0.77	2.4	0.7	0.9	0.9	0.00	0.0
April 6, 2018	0.58	1.8	0.6	0.6	0.6	0.00	0.0
April 7, 2018	0.56	1.7	0.4	0.7	0.5	0.00	0.0
April 8, 2018	0.57	1.8	0.6	0.6	0.6	0.00	0.0
April 9, 2018	0.57	1.8	0.6	0.7	0.5	0.00	0.0
April 10, 2018	0.58	1.8	0.6	0.8	0.5	0.00	0.0
April 11, 2018	0.57	1.7	0.5	0.7	0.5	0.00	0.0
April 12, 2018	0.56	1.7	0.5	0.6	0.5	0.00	0.0
April 13, 2018	0.60	1.9	0.6	0.7	0.6	0.00	0.0
April 14, 2018	0.60	1.8	0.5	0.6	0.6	0.00	0.0
April 15, 2018	0.52	1.6	0.5	0.6	0.5	0.00	0.0
April 16, 2018	0.55	1.7	0.6	0.7	0.4	0.00	0.0
April 17, 2018	0.59	1.8	0.4	0.7	0.7	0.00	0.0
April 18, 2018	0.55	1.7	0.5	0.7	0.4	0.00	0.0
April 19, 2018	0.63	1.9	0.6	0.8	0.5	0.00	0.0
April 20, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
April 21, 2018	0.49	1.5	0.5	0.6	0.4	0.00	0.0
April 22, 2018	0.57	1.8	0.5	0.7	0.6	0.00	0.0
April 23, 2018	0.61	1.9	0.5	0.7	0.6	0.00	0.0
April 24, 2018	0.56	1.7	0.5	0.6	0.5	0.00	0.0
April 25, 2018	0.59	1.8	0.6	0.7	0.5	0.00	0.0
April 26, 2018	0.60	1.8	0.5	0.7	0.7	0.00	0.0
April 27, 2018	0.41	1.3	0.4	0.6	0.3	0.00	0.0
April 28, 2018	0.21	0.7	0.3	0.3	0.1	0.00	0.0
April 29, 2018	0.21	0.6	0.2	0.3	0.1	0.00	0.0
April 30, 2018	0.57	1.7	0.5	0.7	0.5	0.00	0.0
April Total	**16.84**	**51.80**	**15.7**	**20.0**	**16.1**	**0.00**	**0.00**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
May 1, 2018	0.56	1.7	0.5	0.7	0.5	0.00	0.0
May 2, 2018	0.61	1.9	0.6	0.8	0.6	0.00	0.0
May 3, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
May 4, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
May 5, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
May 6, 2018	0.75	2.3	0.7	0.9	0.8	0.00	0.0
May 7, 2018	0.61	1.9	0.6	0.8	0.5	0.00	0.0
May 8, 2018	0.57	1.7	0.5	0.7	0.5	0.00	0.0
May 9, 2018	0.53	1.6	0.5	0.6	0.5	0.00	0.0
May 10, 2018	0.60	1.8	0.6	0.7	0.5	0.00	0.0
May 11, 2018	0.50	1.5	0.5	0.6	0.4	0.00	0.0
May 12, 2018	0.21	0.7	0.3	0.3	0.1	0.00	0.0
May 13, 2018	0.45	1.4	0.5	0.6	0.4	0.00	0.0
May 14, 2018	0.46	1.4	0.3	0.9	0.2	0.00	0.0
May 15, 2018	0.57	1.7	0.5	0.7	0.5	0.00	0.0
May 16, 2018	0.34	1.0	0.4	0.5	0.2	0.00	0.0
May 17, 2018	0.35	1.1	0.4	0.5	0.2	0.00	0.0
May 18, 2018	0.45	1.4	0.6	0.5	0.3	0.00	0.0
May 19, 2018	0.46	1.4	0.7	0.4	0.3	0.00	0.0
May 20, 2018	0.57	1.8	0.6	0.7	0.5	0.00	0.0
May 21, 2018	0.29	0.9	0.4	0.3	0.2	0.00	0.0
May 22, 2018	0.77	2.4	0.8	0.7	0.8	0.00	0.0
May 23, 2018	0.33	1.0	0.5	0.3	0.2	0.00	0.0
May 24, 2018	0.43	1.3	0.4	0.6	0.3	0.00	0.0
May 25, 2018	0.17	0.5	0.2	0.2	0.0	0.00	0.0
May 26, 2018	0.28	0.9	0.3	0.4	0.2	0.00	0.0
May 27, 2018	0.24	0.7	0.3	0.3	0.1	0.00	0.0
May 28, 2018	0.69	2.1	0.9	0.5	0.6	0.00	0.0
May 29, 2018	0.57	1.7	0.7	0.5	0.4	0.00	0.0
May 30, 2018	0.64	2.0	0.8	0.6	0.6	0.00	0.0
May 31, 2018	0.66	2.0	0.9	0.5	0.6	0.00	0.0
May Total	**15.98**	**49.0**	**17.1**	**18.5**	**13.4**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
June 1, 2018	0.77	2.4	1.0	0.7	0.7	0.00	0.0
June 2, 2018	0.69	2.1	0.9	0.6	0.6	0.00	0.0
June 3, 2018	0.70	2.1	0.9	0.3	0.9	0.00	0.0
June 4, 2018	0.60	1.8	0.8	0.5	0.5	0.00	0.0
June 5, 2018	0.54	1.7	0.5	0.7	0.5	0.00	0.0
June 6, 2018	0.53	1.6	0.5	0.5	0.6	0.00	0.0
June 7, 2018	0.31	1.0	0.5	0.3	0.1	0.00	0.0
June 8, 2018	0.30	0.9	0.5	0.1	0.3	0.00	0.0
June 9, 2018	0.22	0.7	0.3	0.3	0.1	0.00	0.0
June 10, 2018	0.28	0.9	0.5	0.0	0.4	0.00	0.0
June 11, 2018	0.27	0.8	0.4	0.2	0.2	0.00	0.0
June 12, 2018	0.65	2.0	0.8	0.5	0.7	0.00	0.0
June 13, 2018	0.39	1.2	0.6	0.4	0.2	0.00	0.0
June 14, 2018	0.64	2.0	0.9	0.5	0.6	0.00	0.0
June 15, 2018	0.54	1.7	0.8	0.0	0.9	0.00	0.0
June 16, 2018	0.57	1.7	0.7	0.0	1.0	0.00	0.0
June 17, 2018	0.77	2.4	1.0	0.6	0.9	0.00	0.0
June 18, 2018	0.26	0.8	0.5	0.1	0.1	0.00	0.0
June 19, 2018	0.75	2.3	1.2	0.5	0.6	0.00	0.0
June 20, 2018	0.69	2.1	0.6	0.8	0.8	0.00	0.0
June 21, 2018	0.27	0.8	0.3	0.4	0.1	0.00	0.0
June 22, 2018	0.25	0.8	0.4	0.2	0.2	0.00	0.0
June 23, 2018	0.28	0.9	0.5	0.2	0.2	0.00	0.0
June 24, 2018	0.30	0.9	0.5	0.3	0.2	0.00	0.0
June 25, 2018	0.26	0.8	0.5	0.2	0.2	0.00	0.0
June 26, 2018	0.77	2.4	0.8	0.4	1.2	0.00	0.0
June 27, 2018	0.13	0.4	0.3	0.1	0.0	0.00	0.0
June 28, 2018	0.49	1.5	0.9	0.2	0.4	0.00	0.0
June 29, 2018	0.51	1.6	0.8	0.3	0.5	0.00	0.0
June 30, 2018	0.49	1.5	0.8	0.3	0.4	0.00	0.0
June Total	**14.20**	**43.8**	**19.4**	**10.3**	**14.2**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
July 1, 2018	0.34	1.0	0.6	0.2	0.2	0.00	0.0
July 2, 2018	0.24	0.7	0.4	0.2	0.1	0.00	0.0
July 3, 2018	0.36	1.1	0.7	0.1	0.3	0.00	0.0
July 4, 2018	0.19	0.6	0.4	0.1	0.1	0.00	0.0
July 5, 2018	0.28	0.9	0.6	0.1	0.2	0.00	0.0
July 6, 2018	0.23	0.7	0.6	0.0	0.1	0.00	0.0
July 7, 2018	0.33	1.0	0.7	0.0	0.3	0.00	0.0
July 8, 2018	0.33	1.0	0.8	0.0	0.2	0.00	0.0
July 9, 2018	0.76	2.3	1.3	0.0	1.0	0.00	0.0
July 10, 2018	0.77	2.4	1.2	0.3	1.0	0.00	0.0
July 11, 2018	0.73	2.2	1.0	0.0	1.2	0.00	0.0
July 12, 2018	0.76	2.3	0.9	0.2	1.2	0.00	0.0
July 13, 2018	0.52	1.6	0.8	0.1	0.7	0.00	0.0
July 14, 2018	0.54	1.7	0.8	0.0	0.9	0.00	0.0
July 15, 2018	0.77	2.4	1.2	0.0	1.2	0.00	0.0
July 16, 2018	0.66	2.0	1.0	0.1	0.9	0.00	0.0
July 17, 2018	0.65	2.0	0.8	0.4	0.8	0.00	0.0
July 18, 2018	0.40	1.2	0.6	0.2	0.4	0.00	0.0
July 19, 2018	0.09	0.3	0.2	0.0	0.0	0.00	0.0
July 20, 2018	0.22	0.7	0.5	0.1	0.1	0.00	0.0
July 21, 2018	0.41	1.3	0.6	0.5	0.3	0.00	0.0
July 22, 2018	0.24	0.7	0.4	0.2	0.1	0.00	0.0
July 23, 2018	0.41	1.3	0.8	0.1	0.4	0.00	0.0
July 24, 2018	0.67	2.1	1.0	0.3	0.8	0.00	0.0
July 25, 2018	0.32	1.0	0.6	0.2	0.2	0.00	0.0
July 26, 2018	0.13	0.4	0.3	0.1	0.0	0.00	0.0
July 27, 2018	0.28	0.8	0.5	0.1	0.2	0.00	0.0
July 28, 2018	0.34	1.0	0.4	0.3	0.3	0.00	0.0
July 29, 2018	0.19	0.6	0.3	0.2	0.1	0.00	0.0
July 30, 2018	0.57	1.8	0.8	0.3	0.7	0.00	0.0
July 31, 2018	0.63	1.9	0.8	0.4	0.7	0.00	0.0
July Total	**13.36**	**41.0**	**21.7**	**4.5**	**14.9**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
August 1, 2018	0.34	1.0	0.6	0.1	0.3	0.00	0.0
August 2, 2018	0.31	0.9	0.5	0.2	0.2	0.00	0.0
August 3, 2018	0.70	2.1	0.8	0.6	0.7	0.00	0.0
August 4, 2018	0.47	1.5	0.7	0.4	0.4	0.00	0.0
August 5, 2018	0.39	1.2	0.5	0.3	0.3	0.00	0.0
August 6, 2018	0.30	0.9	0.5	0.3	0.2	0.00	0.0
August 7, 2018	0.77	2.4	0.8	0.7	0.9	0.00	0.0
August 8, 2018	0.40	1.2	0.6	0.3	0.2	0.00	0.0
August 9, 2018	0.39	1.2	0.4	0.5	0.3	0.00	0.0
August 10, 2018	0.24	0.7	0.3	0.3	0.1	0.00	0.0
August 11, 2018	0.48	1.5	0.7	0.4	0.4	0.00	0.0
August 12, 2018	0.77	2.4	0.9	0.2	1.3	0.00	0.0
August 13, 2018	0.72	2.2	0.9	0.2	1.1	0.00	0.0
August 14, 2018	0.72	2.2	0.5	0.8	0.9	0.00	0.0
August 15, 2018	0.62	1.9	0.8	0.1	0.9	0.00	0.0
August 16, 2018	0.60	1.8	0.7	0.5	0.6	0.00	0.0
August 17, 2018	0.69	2.1	0.9	0.3	0.9	0.00	0.0
August 18, 2018	0.59	1.8	0.7	0.5	0.6	0.00	0.0
August 19, 2018	0.52	1.6	0.7	0.3	0.7	0.00	0.0
August 20, 2018	0.56	1.7	0.7	0.5	0.5	0.00	0.0
August 21, 2018	0.65	2.0	0.7	0.7	0.7	0.00	0.0
August 22, 2018	0.77	2.4	1.0	0.4	1.0	0.00	0.0
August 23, 2018	0.44	1.4	0.5	0.5	0.3	0.00	0.0
August 24, 2018	0.24	0.7	0.3	0.3	0.1	0.00	0.0
August 25, 2018	0.24	0.7	0.3	0.3	0.1	0.00	0.0
August 26, 2018	0.38	1.2	0.4	0.5	0.2	0.00	0.0
August 27, 2018	0.57	1.7	0.7	0.5	0.5	0.00	0.0
August 28, 2018	0.34	1.0	0.4	0.4	0.2	0.00	0.0
August 29, 2018	0.75	2.3	0.8	0.7	0.8	0.00	0.0
August 30, 2018	0.57	1.8	0.8	0.6	0.4	0.00	0.0
August 31, 2018	0.63	1.9	0.6	0.7	0.5	0.00	0.0
August Total	16.15	**49.4**	**19.8**	**13.4**	**16.3**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
September 1, 2018	0.77	2.4	0.9	0.7	0.7	0.00	0.0
September 2, 2018	0.37	1.1	0.5	0.4	0.3	0.00	0.0
September 3, 2018	0.75	2.3	0.9	0.6	0.8	0.00	0.0
September 4, 2018	0.77	2.4	0.8	0.4	1.2	0.00	0.0
September 5, 2018	0.71	2.2	0.6	0.6	1.0	0.00	0.0
September 6, 2018	0.71	2.2	0.8	0.3	1.1	0.00	0.0
September 7, 2018	0.77	2.4	0.9	0.6	1.0	0.00	0.0
September 8, 2018	0.69	2.1	0.7	0.3	1.1	0.00	0.0
September 9, 2018	0.64	2.0	0.8	0.2	1.0	0.00	0.0
September 10, 2018	0.77	2.4	0.7	0.5	1.2	0.00	0.0
September 11, 2018	0.74	2.3	0.9	0.1	1.3	0.00	0.0
September 12, 2018	0.61	1.9	0.6	0.5	0.8	0.00	0.0
September 13, 2018	0.71	2.2	0.9	0.4	1.0	0.00	0.0
September 14, 2018	0.77	2.4	1.0	0.2	1.2	0.00	0.0
September 15, 2018	0.64	2.0	0.7	0.3	1.0	0.00	0.0
September 16, 2018	0.65	2.0	0.8	0.2	1.0	0.00	0.0
September 17, 2018	0.71	2.2	0.8	0.3	1.1	0.00	0.0
September 18, 2018	0.74	2.3	0.9	0.3	1.1	0.00	0.0
September 19, 2018	0.64	2.0	0.8	0.3	0.9	0.00	0.0
September 20, 2018	0.64	2.0	0.8	0.3	0.9	0.00	0.0
September 21, 2018	0.77	2.4	1.0	0.5	1.0	0.00	0.0
September 22, 2018	0.77	2.4	0.7	0.5	1.3	0.00	0.0
September 23, 2018	0.67	2.1	0.8	0.2	1.1	0.00	0.0
September 24, 2018	0.69	2.1	0.7	0.6	0.8	0.00	0.0
September 25, 2018	0.62	1.9	0.7	0.4	0.9	0.00	0.0
September 26, 2018	0.77	2.4	0.8	0.6	1.0	0.00	0.0
September 27, 2018	0.74	2.3	0.9	0.6	0.8	0.00	0.0
September 28, 2018	0.74	2.3	1.1	0.3	0.9	0.00	0.0
September 29, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
September 30, 2018	0.77	2.4	1.0	0.2	1.2	0.00	0.0
September Total	**21.10**	**65.5**	**23.9**	**12.1**	**29.5**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
October 1, 2018	0.62	1.9	0.8	0.4	0.8	0.00	0.0
October 2, 2018	0.62	1.9	0.5	0.7	0.7	0.00	0.0
October 3, 2018	0.61	1.9	0.7	0.4	0.8	0.00	0.0
October 4, 2018	0.28	1.9	0.6	0.9	0.4	0.00	0.0
October 5, 2018	0.77	0.9	0.2	0.4	0.4	0.00	0.0
October 6, 2018	0.52	2.4	0.5	1.2	0.7	0.00	0.0
October 7, 2018	0.65	1.6	0.4	0.7	0.5	0.00	0.0
October 8, 2018	0.58	2.0	0.7	0.7	0.6	0.00	0.0
October 9, 2018	0.77	1.8	0.5	0.5	0.8	0.00	0.0
October 10, 2018	0.51	2.4	0.7	1.0	0.7	0.00	0.0
October 11, 2018	0.54	1.6	0.4	0.6	0.5	0.00	0.0
October 12, 2018	0.77	1.7	0.3	0.8	0.7	0.00	0.0
October 13, 2018	0.77	2.4	0.2	1.1	1.2	0.00	0.0
October 14, 2018	0.77	2.4	0.5	1.0	0.9	0.00	0.0
October 15, 2018	0.77	2.4	0.4	1.0	1.0	0.00	0.0
October 16, 2018	0.77	2.4	0.0	1.3	1.1	0.00	0.0
October 17, 2018	0.77	2.4	0.4	1.0	1.0	0.00	0.0
October 18, 2018	0.71	2.4	0.5	1.0	0.9	0.00	0.0
October 19, 2018	0.77	2.2	0.4	0.9	1.0	0.00	0.0
October 20, 2018	0.77	2.4	0.0	1.2	1.2	0.00	0.0
October 21, 2018	0.68	2.4	0.5	1.0	0.9	0.00	0.0
October 22, 2018	0.65	2.1	0.5	0.9	0.7	0.00	0.0
October 23, 2018	0.64	2.0	0.6	0.8	0.6	0.00	0.0
October 24, 2018	0.77	2.0	0.4	0.9	0.7	0.00	0.0
October 25, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
October 26, 2018	0.77	2.4	0.3	1.1	1.0	0.00	0.0
October 27, 2018	0.74	2.4	0.1	1.1	1.1	0.00	0.0
October 28, 2018	0.70	2.3	0.7	0.9	0.7	0.00	0.0
October 29, 2018	0.69	2.1	0.3	1.0	0.8	0.00	0.0
October 30, 2018	0.77	2.1	0.0	1.1	1.0	0.00	0.0
October 31, 2018	0.77	2.4	0.2	0.8	1.4	0.00	0.0
October Total	**21.30**	**65.6**	**12.6**	**27.1**	**25.9**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
November 1, 2018	0.77	2.4	1.1	0.3	1.0	0.00	0.0
November 2, 2018	0.77	2.4	1.1	0.4	0.9	0.00	0.0
November 3, 2018	0.77	2.4	1.1	0.5	0.8	0.00	0.0
November 4, 2018	0.77	2.4	1.0	0.6	0.9	0.00	0.0
November 5, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
November 6, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
November 7, 2018	0.66	2.0	0.6	0.7	0.7	0.00	0.0
November 8, 2018	0.77	2.4	0.7	0.8	0.9	0.00	0.0
November 9, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
November 10, 2018	0.64	2.0	0.6	0.8	0.6	0.00	0.0
November 11, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
November 12, 2018	0.77	2.4	0.7	0.9	0.8	0.00	0.0
November 13, 2018	0.77	2.4	0.9	0.9	0.5	0.00	0.0
November 14, 2018	0.77	2.4	0.6	0.9	0.9	0.00	0.0
November 15, 2018	0.77	2.4	0.9	0.6	0.9	0.00	0.0
November 16, 2018	0.77	2.4	1.0	0.5	0.9	0.00	0.0
November 17, 2018	0.77	2.4	1.0	0.5	0.9	0.00	0.0
November 18, 2018	0.77	2.4	0.8	0.5	1.1	0.00	0.0
November 19, 2018	0.77	2.4	0.9	0.4	1.1	0.00	0.0
November 20, 2018	0.77	2.4	0.9	0.6	0.9	0.00	0.0
November 21, 2018	0.77	2.4	0.9	0.5	1.0	0.00	0.0
November 22, 2018	0.77	2.4	0.9	0.5	1.1	0.00	0.0
November 23, 2018	0.77	2.4	0.9	0.6	1.0	0.00	0.0
November 24, 2018	0.77	2.4	0.9	0.5	1.0	0.00	0.0
November 25, 2018	0.77	2.4	0.9	0.5	1.0	0.00	0.0
November 26, 2018	0.77	2.4	0.8	0.5	1.1	0.00	0.0
November 27, 2018	0.77	2.4	1.0	0.5	0.9	0.00	0.0
November 28, 2018	0.77	2.4	1.1	0.2	1.1	0.00	0.0
November 29, 2018	0.73	2.2	0.9	0.3	1.0	0.00	0.0
November 30, 2018	0.77	2.4	1.0	0.4	0.9	0.00	0.0
November Total	**22.82**	**71.0**	**25.9**	**17.8**	**27.3**	**0.00**	**0.0**

Table 2b - Wastewater Discharge by Source for Canton for 2018 - Outfall 002

(2.1) Date	Total Outfall 2 Discharge (Return Flows)		Source of Discharge (Acre-Feet)			Amount of Outfall 2 Subject to Environmental Flow Bypass	
	(2.2) (Million Gallons)	(2.3) (Acre-Feet)	(2.4) Originating from Mill Creek Lake	(2.5) Originating from Groundwater	(2.6) Originating from Other Sources (I/I, Septic Haulers, Tank Drains, Etc.)	(2.7) (Million Gallons)	(2.8) (Acre-Feet)
December 1, 2018	0.77	2.4	1.0	0.5	0.9	0.00	0.0
December 2, 2018	0.77	2.4	1.1	0.3	1.0	0.00	0.0
December 3, 2018	0.77	2.4	1.1	0.2	1.1	0.00	0.0
December 4, 2018	0.77	2.4	1.0	0.2	1.1	0.00	0.0
December 5, 2018	0.77	2.4	1.0	0.3	1.1	0.00	0.0
December 6, 2018	0.77	2.4	0.8	0.4	1.2	0.00	0.0
December 7, 2018	0.77	2.4	0.8	0.5	1.1	0.00	0.0
December 8, 2018	0.77	2.4	1.3	0.0	1.1	0.00	0.0
December 9, 2018	0.77	2.4	1.2	0.0	1.2	0.00	0.0
December 10, 2018	0.77	2.4	0.8	0.3	1.3	0.00	0.0
December 11, 2018	0.77	2.4	0.6	0.7	1.1	0.00	0.0
December 12, 2018	0.77	2.4	0.6	0.7	1.2	0.00	0.0
December 13, 2018	0.77	2.4	0.6	0.6	1.2	0.00	0.0
December 14, 2018	0.77	2.4	0.9	0.3	1.2	0.00	0.0
December 15, 2018	0.77	2.4	1.0	0.3	1.1	0.00	0.0
December 16, 2018	0.77	2.4	0.7	0.6	1.1	0.00	0.0
December 17, 2018	0.77	2.4	0.8	0.5	1.1	0.00	0.0
December 18, 2018	0.77	2.4	0.5	0.8	1.1	0.00	0.0
December 19, 2018	0.77	2.4	0.9	0.2	1.3	0.00	0.0
December 20, 2018	0.77	2.4	0.7	0.4	1.3	0.00	0.0
December 21, 2018	0.77	2.4	0.9	0.3	1.2	0.00	0.0
December 22, 2018	0.77	2.4	0.8	0.4	1.2	0.00	0.0
December 23, 2018	0.77	2.4	0.8	0.3	1.3	0.00	0.0
December 24, 2018	0.70	2.1	0.8	0.2	1.0	0.00	0.0
December 25, 2018	0.68	2.1	0.9	0.0	1.2	0.00	0.0
December 26, 2018	0.77	2.4	0.9	0.0	1.5	0.00	0.0
December 27, 2018	0.77	2.4	1.0	0.4	1.0	0.00	0.0
December 28, 2018	0.62	1.9	0.8	0.3	0.9	0.00	0.0
December 29, 2018	0.77	2.4	0.7	0.5	1.2	0.00	0.0
December 30, 2018	0.77	2.4	0.8	0.2	1.4	0.00	0.0
December 31, 2018	0.77	2.4	0.8	0.5	1.1	0.00	0.0
December Total	**23.56**	**73.3**	**26.7**	**10.8**	**35.7**	**0.00**	**0.0**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
January 2018	18.42	56.5	18.63	57.1	6.00	6.0	TRUE
February 2018	22.79	69.9	25.93	79.6	6.00	6.0	TRUE
March 2018	22.38	68.7	22.31	68.8	6.00	6.0	TRUE
April 2018	17.44	53.5	17.14	52.6	3.00	3.0	TRUE
May 2018	17.45	53.6	18.11	55.4	3.00	3.0	TRUE
June 2018	14.83	45.5	14.02	43.0	3.00	3.0	TRUE
July 2018	13.36	41.0	13.50	41.4	1.00	1.0	TRUE
August 2018	16.26	49.9	16.80	51.3	1.00	1.0	TRUE
September 2018	21.78	66.8	21.69	67.0	1.00	1.0	TRUE
October 2018	25.91	79.5	30.67	94.2	1.00	1.0	TRUE
November 2018	29.56	90.7	30.70	94.1	1.00	1.0	TRUE
December 2018	30.61	93.9	34.54	106.0	1.00	1.0	TRUE
2018 Total	**250.79**	**769.7**	**264.02**	**810.5**	**33.00**	**2.8**	TRUE

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
January 1, 2018	0.49	1.5	0.59	1.8	6.0	6.0	TRUE
January 2, 2018	0.49	1.5	0.68	2.1	6.0	6.0	TRUE
January 3, 2018	0.59	1.8	0.52	1.6	6.0	6.0	TRUE
January 4, 2018	0.68	2.1	0.58	1.8	6.0	6.0	TRUE
January 5, 2018	0.52	1.6	0.51	1.6	6.0	6.0	TRUE
January 6, 2018	0.58	1.8	0.70	2.1	6.0	6.0	TRUE
January 7, 2018	0.51	1.6	0.58	1.8	6.0	6.0	TRUE
January 8, 2018	0.70	2.1	0.55	1.7	6.0	6.0	TRUE
January 9, 2018	0.58	1.8	0.59	1.8	6.0	6.0	TRUE
January 10, 2018	0.55	1.7	0.57	1.7	6.0	6.0	TRUE
January 11, 2018	0.59	1.8	0.39	1.2	6.0	6.0	TRUE
January 12, 2018	0.57	1.7	0.71	2.2	6.0	6.0	TRUE
January 13, 2018	0.39	1.2	0.56	1.7	6.0	6.0	TRUE
January 14, 2018	0.71	2.2	0.60	1.8	6.0	6.0	TRUE
January 15, 2018	0.56	1.7	0.55	1.7	6.0	6.0	TRUE
January 16, 2018	0.60	1.8	0.61	1.9	6.0	6.0	TRUE
January 17, 2018	0.55	1.7	0.80	2.5	6.0	6.0	TRUE
January 18, 2018	0.61	1.9	0.70	2.1	6.0	6.0	TRUE
January 19, 2018	0.80	2.5	0.57	1.7	6.0	6.0	TRUE
January 20, 2018	0.70	2.1	0.77	2.4	6.0	6.0	TRUE
January 21, 2018	0.57	1.7	0.66	2.0	6.0	6.0	TRUE
January 22, 2018	0.77	2.4	0.60	1.9	6.0	6.0	TRUE
January 23, 2018	0.66	2.0	0.66	2.0	6.0	6.0	TRUE
January 24, 2018	0.60	1.9	0.58	1.8	6.0	6.0	TRUE
January 25, 2018	0.66	2.0	0.60	1.8	6.0	6.0	TRUE
January 26, 2018	0.58	1.8	0.50	1.5	6.0	6.0	TRUE
January 27, 2018	0.60	1.8	0.56	1.7	6.0	6.0	TRUE
January 28, 2018	0.50	1.5	0.67	2.1	6.0	6.0	TRUE
January 29, 2018	0.56	1.7	0.51	1.5	6.0	6.0	TRUE
January 30, 2018	0.67	2.1	0.68	2.1	6.0	6.0	TRUE
January 31, 2018	0.51	1.5	0.50	1.5	6.0	6.0	TRUE
January Total	**18.42**	**56.5**	**18.63**	**57.1**	**6.0**	**6.0**	TRUE

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
February 1, 2018	0.68	2.1	0.62	1.9	6.0	6.0	TRUE
February 2, 2018	0.50	1.5	0.78	2.4	6.0	6.0	TRUE
February 3, 2018	0.62	1.9	0.56	1.7	6.0	6.0	TRUE
February 4, 2018	0.78	2.4	0.58	1.8	6.0	6.0	TRUE
February 5, 2018	0.56	1.7	1.69	5.2	6.0	6.0	TRUE
February 6, 2018	0.58	1.8	0.89	2.7	6.0	6.0	TRUE
February 7, 2018	1.30	4.0	0.74	2.3	6.0	6.0	TRUE
February 8, 2018	0.89	2.7	0.76	2.3	6.0	6.0	TRUE
February 9, 2018	0.74	2.3	0.54	1.7	6.0	6.0	TRUE
February 10, 2018	0.76	2.3	0.59	1.8	6.0	6.0	TRUE
February 11, 2018	0.54	1.7	0.61	1.9	6.0	6.0	TRUE
February 12, 2018	0.59	1.8	0.66	2.0	6.0	6.0	TRUE
February 13, 2018	0.61	1.9	0.60	1.8	6.0	6.0	TRUE
February 14, 2018	0.66	2.0	0.57	1.7	6.0	6.0	TRUE
February 15, 2018	0.60	1.8	0.63	1.9	6.0	6.0	TRUE
February 16, 2018	0.57	1.7	0.60	1.9	6.0	6.0	TRUE
February 17, 2018	0.63	1.9	0.61	1.9	6.0	6.0	TRUE
February 18, 2018	0.60	1.9	0.47	1.4	6.0	6.0	TRUE
February 19, 2018	0.61	1.9	2.19	6.7	6.0	6.0	TRUE
February 20, 2018	0.47	1.4	1.96	6.0	6.0	6.0	TRUE
February 21, 2018	1.30	4.0	1.92	5.9	6.0	6.0	TRUE
February 22, 2018	1.30	4.0	1.27	3.9	6.0	6.0	TRUE
February 23, 2018	1.30	4.0	1.35	4.1	6.0	6.0	TRUE
February 24, 2018	1.27	3.9	0.98	3.0	6.0	6.0	TRUE
February 25, 2018	1.30	4.0	0.87	2.7	6.0	6.0	TRUE
February 26, 2018	0.98	3.0	1.20	3.7	6.0	6.0	TRUE
February 27, 2018	0.87	2.7	0.47	1.5	6.0	6.0	TRUE
February 28, 2018	1.20	3.7	1.23	3.8	6.0	6.0	TRUE
February 29, 2010 (if leap year)							
February Total	**22.79**	**69.9**	**25.93**	**79.6**	**6.0**	**6.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
March 1, 2018	0.47	1.5	1.00	3.1	6.0	6.0	TRUE
March 2, 2018	1.23	3.8	0.93	2.9	6.0	6.0	TRUE
March 3, 2018	1.00	3.1	0.84	2.6	6.0	6.0	TRUE
March 4, 2018	0.93	2.9	0.71	2.2	6.0	6.0	TRUE
March 5, 2018	0.84	2.6	0.68	2.1	6.0	6.0	TRUE
March 6, 2018	0.71	2.2	0.71	2.2	6.0	6.0	TRUE
March 7, 2018	0.68	2.1	0.68	2.1	6.0	6.0	TRUE
March 8, 2018	0.71	2.2	0.68	2.1	6.0	6.0	TRUE
March 9, 2018	0.68	2.1	0.58	1.8	6.0	6.0	TRUE
March 10, 2018	0.68	2.1	0.61	1.9	6.0	6.0	TRUE
March 11, 2018	0.58	1.8	0.59	1.8	6.0	6.0	TRUE
March 12, 2018	0.61	1.9	0.61	1.9	6.0	6.0	TRUE
March 13, 2018	0.59	1.8	0.61	1.9	6.0	6.0	TRUE
March 14, 2018	0.61	1.9	0.60	1.8	6.0	6.0	TRUE
March 15, 2018	0.61	1.9	0.55	1.7	6.0	6.0	TRUE
March 16, 2018	0.60	1.8	0.91	2.8	6.0	6.0	TRUE
March 17, 2018	0.55	1.7	0.69	2.1	6.0	6.0	TRUE
March 18, 2018	0.91	2.8	0.61	1.9	6.0	6.0	TRUE
March 19, 2018	0.69	2.1	0.62	1.9	6.0	6.0	TRUE
March 20, 2018	0.61	1.9	0.63	1.9	6.0	6.0	TRUE
March 21, 2018	0.62	1.9	0.59	1.8	6.0	6.0	TRUE
March 22, 2018	0.63	1.9	0.58	1.8	6.0	6.0	TRUE
March 23, 2018	0.59	1.8	0.57	1.8	6.0	6.0	TRUE
March 24, 2018	0.58	1.8	0.51	1.6	6.0	6.0	TRUE
March 25, 2018	0.57	1.8	0.54	1.7	6.0	6.0	TRUE
March 26, 2018	0.51	1.6	0.89	2.7	6.0	6.0	TRUE
March 27, 2018	0.54	1.7	1.49	4.6	6.0	6.0	TRUE
March 28, 2018	0.89	2.7	0.99	3.0	6.0	6.0	TRUE
March 29, 2018	1.30	4.0	0.88	2.7	6.0	6.0	TRUE
March 30, 2018	0.99	3.0	0.83	2.5	6.0	6.0	TRUE
March 31, 2018	0.88	2.7	0.61	1.9	6.0	6.0	TRUE
March Total	**22.38**	**68.7**	**22.31**	**68.8**	**6.0**	**6.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
April 1, 2018	0.83	2.5	0.63	1.9	3.0	3.0	TRUE
April 2, 2018	0.61	1.9	0.60	1.8	3.0	3.0	TRUE
April 3, 2018	0.63	1.9	0.63	1.9	3.0	3.0	TRUE
April 4, 2018	0.60	1.8	0.96	2.9	3.0	3.0	TRUE
April 5, 2018	0.63	1.9	0.58	1.8	3.0	3.0	TRUE
April 6, 2018	0.96	2.9	0.56	1.7	3.0	3.0	TRUE
April 7, 2018	0.58	1.8	0.57	1.8	3.0	3.0	TRUE
April 8, 2018	0.56	1.7	0.57	1.8	3.0	3.0	TRUE
April 9, 2018	0.57	1.8	0.58	1.8	3.0	3.0	TRUE
April 10, 2018	0.57	1.8	0.57	1.7	3.0	3.0	TRUE
April 11, 2018	0.58	1.8	0.56	1.7	3.0	3.0	TRUE
April 12, 2018	0.57	1.7	0.60	1.9	3.0	3.0	TRUE
April 13, 2018	0.56	1.7	0.60	1.8	3.0	3.0	TRUE
April 14, 2018	0.60	1.9	0.52	1.6	3.0	3.0	TRUE
April 15, 2018	0.60	1.8	0.55	1.7	3.0	3.0	TRUE
April 16, 2018	0.52	1.6	0.59	1.8	3.0	3.0	TRUE
April 17, 2018	0.55	1.7	0.55	1.7	3.0	3.0	TRUE
April 18, 2018	0.59	1.8	0.63	1.9	3.0	3.0	TRUE
April 19, 2018	0.55	1.7	0.93	2.9	3.0	3.0	TRUE
April 20, 2018	0.63	1.9	0.49	1.5	3.0	3.0	TRUE
April 21, 2018	0.93	2.9	0.57	1.8	3.0	3.0	TRUE
April 22, 2018	0.49	1.5	0.61	1.9	3.0	3.0	TRUE
April 23, 2018	0.57	1.8	0.56	1.7	3.0	3.0	TRUE
April 24, 2018	0.61	1.9	0.59	1.8	3.0	3.0	TRUE
April 25, 2018	0.56	1.7	0.60	1.8	3.0	3.0	TRUE
April 26, 2018	0.59	1.8	0.41	1.3	3.0	3.0	TRUE
April 27, 2018	0.60	1.8	0.21	0.7	3.0	3.0	TRUE
April 28, 2018	0.41	1.3	0.21	0.6	3.0	3.0	TRUE
April 29, 2018	0.21	0.7	0.57	1.7	3.0	3.0	TRUE
April 30, 2018	0.21	0.6	0.56	1.7	3.0	3.0	TRUE
April Total	**17.44**	**53.5**	**17.14**	**52.6**	**3.0**	**3.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
May 1, 2018	0.57	1.7	0.61	1.9	3.0	3.0	TRUE
May 2, 2018	0.56	1.7	1.15	3.5	3.0	3.0	TRUE
May 3, 2018	0.61	1.9	1.43	4.4	3.0	3.0	TRUE
May 4, 2018	1.15	3.5	1.00	3.1	3.0	3.0	TRUE
May 5, 2018	1.30	4.0	0.75	2.3	3.0	3.0	TRUE
May 6, 2018	1.00	3.1	0.61	1.9	3.0	3.0	TRUE
May 7, 2018	0.75	2.3	0.57	1.7	3.0	3.0	TRUE
May 8, 2018	0.61	1.9	0.53	1.6	3.0	3.0	TRUE
May 9, 2018	0.57	1.7	0.60	1.8	3.0	3.0	TRUE
May 10, 2018	0.53	1.6	0.50	1.5	3.0	3.0	TRUE
May 11, 2018	0.60	1.8	0.21	0.7	3.0	3.0	TRUE
May 12, 2018	0.50	1.5	0.45	1.4	3.0	3.0	TRUE
May 13, 2018	0.21	0.7	0.46	1.4	3.0	3.0	TRUE
May 14, 2018	0.45	1.4	0.57	1.7	3.0	3.0	TRUE
May 15, 2018	0.46	1.4	0.34	1.0	3.0	3.0	TRUE
May 16, 2018	0.57	1.7	0.35	1.1	3.0	3.0	TRUE
May 17, 2018	0.34	1.0	0.45	1.4	3.0	3.0	TRUE
May 18, 2018	0.35	1.1	0.46	1.4	3.0	3.0	TRUE
May 19, 2018	0.45	1.4	0.57	1.8	3.0	3.0	TRUE
May 20, 2018	0.46	1.4	0.29	0.9	3.0	3.0	TRUE
May 21, 2018	0.57	1.8	1.20	3.7	3.0	3.0	TRUE
May 22, 2018	0.29	0.9	0.33	1.0	3.0	3.0	TRUE
May 23, 2018	1.20	3.7	0.43	1.3	3.0	3.0	TRUE
May 24, 2018	0.33	1.0	0.17	0.5	3.0	3.0	TRUE
May 25, 2018	0.43	1.3	0.28	0.9	3.0	3.0	TRUE
May 26, 2018	0.17	0.5	0.24	0.7	3.0	3.0	TRUE
May 27, 2018	0.28	0.9	0.69	2.1	3.0	3.0	TRUE
May 28, 2018	0.24	0.7	0.57	1.7	3.0	3.0	TRUE
May 29, 2018	0.69	2.1	0.64	2.0	3.0	3.0	TRUE
May 30, 2018	0.57	1.7	0.66	2.0	3.0	3.0	TRUE
May 31, 2018	0.64	2.0	0.99	3.0	3.0	3.0	TRUE
May Total	**17.45**	**53.6**	**18.11**	**55.4**	**3.0**	**3.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
June 1, 2018	0.66	2.0	0.69	2.1	3.0	3.0	TRUE
June 2, 2018	0.99	3.0	0.70	2.1	3.0	3.0	TRUE
June 3, 2018	0.69	2.1	0.60	1.8	3.0	3.0	TRUE
June 4, 2018	0.70	2.1	0.54	1.7	3.0	3.0	TRUE
June 5, 2018	0.60	1.8	0.53	1.6	3.0	3.0	TRUE
June 6, 2018	0.54	1.7	0.31	1.0	3.0	3.0	TRUE
June 7, 2018	0.53	1.6	0.30	0.9	3.0	3.0	TRUE
June 8, 2018	0.31	1.0	0.22	0.7	3.0	3.0	TRUE
June 9, 2018	0.30	0.9	0.28	0.9	3.0	3.0	TRUE
June 10, 2018	0.22	0.7	0.27	0.8	3.0	3.0	TRUE
June 11, 2018	0.28	0.9	0.65	2.0	3.0	3.0	TRUE
June 12, 2018	0.27	0.8	0.39	1.2	3.0	3.0	TRUE
June 13, 2018	0.65	2.0	0.64	2.0	3.0	3.0	TRUE
June 14, 2018	0.39	1.2	0.54	1.7	3.0	3.0	TRUE
June 15, 2018	0.64	2.0	0.57	1.7	3.0	3.0	TRUE
June 16, 2018	0.54	1.7	0.92	2.8	3.0	3.0	TRUE
June 17, 2018	0.57	1.7	0.26	0.8	3.0	3.0	TRUE
June 18, 2018	0.92	2.8	0.75	2.3	3.0	3.0	TRUE
June 19, 2018	0.26	0.8	0.69	2.1	3.0	3.0	TRUE
June 20, 2018	0.75	2.3	0.27	0.8	3.0	3.0	TRUE
June 21, 2018	0.69	2.1	0.25	0.8	3.0	3.0	TRUE
June 22, 2018	0.27	0.8	0.28	0.9	3.0	3.0	TRUE
June 23, 2018	0.25	0.8	0.30	0.9	3.0	3.0	TRUE
June 24, 2018	0.28	0.9	0.26	0.8	3.0	3.0	TRUE
June 25, 2018	0.30	0.9	0.86	2.6	3.0	3.0	TRUE
June 26, 2018	0.26	0.8	0.13	0.4	3.0	3.0	TRUE
June 27, 2018	0.86	2.6	0.49	1.5	3.0	3.0	TRUE
June 28, 2018	0.13	0.4	0.51	1.6	3.0	3.0	TRUE
June 29, 2018	0.49	1.5	0.49	1.5	3.0	3.0	TRUE
June 30, 2018	0.51	1.6	0.34	1.0	3.0	3.0	TRUE
June Total	**14.83**	**45.5**	**14.02**	**43.0**	**3.0**	**3.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
July 1, 2018	0.49	1.5	0.24	0.7	1.0	1.0	TRUE
July 2, 2018	0.34	1.0	0.36	1.1	1.0	1.0	TRUE
July 3, 2018	0.24	0.7	0.19	0.6	1.0	1.0	TRUE
July 4, 2018	0.36	1.1	0.28	0.9	1.0	1.0	TRUE
July 5, 2018	0.19	0.6	0.23	0.7	1.0	1.0	TRUE
July 6, 2018	0.28	0.9	0.33	1.0	1.0	1.0	TRUE
July 7, 2018	0.23	0.7	0.33	1.0	1.0	1.0	TRUE
July 8, 2018	0.33	1.0	0.76	2.3	1.0	1.0	TRUE
July 9, 2018	0.33	1.0	0.84	2.6	1.0	1.0	TRUE
July 10, 2018	0.76	2.3	0.73	2.2	1.0	1.0	TRUE
July 11, 2018	0.84	2.6	0.76	2.3	1.0	1.0	TRUE
July 12, 2018	0.73	2.2	0.52	1.6	1.0	1.0	TRUE
July 13, 2018	0.76	2.3	0.54	1.7	1.0	1.0	TRUE
July 14, 2018	0.52	1.6	0.84	2.6	1.0	1.0	TRUE
July 15, 2018	0.54	1.7	0.66	2.0	1.0	1.0	TRUE
July 16, 2018	0.84	2.6	0.65	2.0	1.0	1.0	TRUE
July 17, 2018	0.66	2.0	0.40	1.2	1.0	1.0	TRUE
July 18, 2018	0.65	2.0	0.09	0.3	1.0	1.0	TRUE
July 19, 2018	0.40	1.2	0.22	0.7	1.0	1.0	TRUE
July 20, 2018	0.09	0.3	0.41	1.3	1.0	1.0	TRUE
July 21, 2018	0.22	0.7	0.24	0.7	1.0	1.0	TRUE
July 22, 2018	0.41	1.3	0.41	1.3	1.0	1.0	TRUE
July 23, 2018	0.24	0.7	0.67	2.1	1.0	1.0	TRUE
July 24, 2018	0.41	1.3	0.32	1.0	1.0	1.0	TRUE
July 25, 2018	0.67	2.1	0.13	0.4	1.0	1.0	TRUE
July 26, 2018	0.32	1.0	0.28	0.8	1.0	1.0	TRUE
July 27, 2018	0.13	0.4	0.34	1.0	1.0	1.0	TRUE
July 28, 2018	0.28	0.8	0.19	0.6	1.0	1.0	TRUE
July 29, 2018	0.34	1.0	0.57	1.8	1.0	1.0	TRUE
July 30, 2018	0.19	0.6	0.63	1.9	1.0	1.0	TRUE
July 31, 2018	0.57	1.8	0.34	1.0	1.0	1.0	TRUE
July Total	**13.36**	**41.0**	**13.50**	**41.4**	**1.0**	**1.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
August 1, 2018	0.63	1.9	0.31	0.9	1.0	1.0	TRUE
August 2, 2018	0.34	1.0	0.70	2.1	1.0	1.0	TRUE
August 3, 2018	0.31	0.9	0.47	1.5	1.0	1.0	TRUE
August 4, 2018	0.70	2.1	0.39	1.2	1.0	1.0	TRUE
August 5, 2018	0.47	1.5	0.30	0.9	1.0	1.0	TRUE
August 6, 2018	0.39	1.2	0.82	2.5	1.0	1.0	TRUE
August 7, 2018	0.30	0.9	0.40	1.2	1.0	1.0	TRUE
August 8, 2018	0.82	2.5	0.39	1.2	1.0	1.0	TRUE
August 9, 2018	0.40	1.2	0.24	0.7	1.0	1.0	TRUE
August 10, 2018	0.39	1.2	0.48	1.5	1.0	1.0	TRUE
August 11, 2018	0.24	0.7	0.83	2.5	1.0	1.0	TRUE
August 12, 2018	0.48	1.5	0.72	2.2	1.0	1.0	TRUE
August 13, 2018	0.83	2.5	0.72	2.2	1.0	1.0	TRUE
August 14, 2018	0.72	2.2	0.62	1.9	1.0	1.0	TRUE
August 15, 2018	0.72	2.2	0.60	1.8	1.0	1.0	TRUE
August 16, 2018	0.62	1.9	0.69	2.1	1.0	1.0	TRUE
August 17, 2018	0.60	1.8	0.59	1.8	1.0	1.0	TRUE
August 18, 2018	0.69	2.1	0.52	1.6	1.0	1.0	TRUE
August 19, 2018	0.59	1.8	0.56	1.7	1.0	1.0	TRUE
August 20, 2018	0.52	1.6	0.65	2.0	1.0	1.0	TRUE
August 21, 2018	0.56	1.7	0.77	2.4	1.0	1.0	TRUE
August 22, 2018	0.65	2.0	0.44	1.4	1.0	1.0	TRUE
August 23, 2018	0.77	2.4	0.24	0.7	1.0	1.0	TRUE
August 24, 2018	0.44	1.4	0.24	0.7	1.0	1.0	TRUE
August 25, 2018	0.24	0.7	0.38	1.2	1.0	1.0	TRUE
August 26, 2018	0.24	0.7	0.57	1.7	1.0	1.0	TRUE
August 27, 2018	0.38	1.2	0.34	1.0	1.0	1.0	TRUE
August 28, 2018	0.57	1.7	0.75	2.3	1.0	1.0	TRUE
August 29, 2018	0.34	1.0	0.57	1.8	1.0	1.0	TRUE
August 30, 2018	0.75	2.3	0.63	1.9	1.0	1.0	TRUE
August 31, 2018	0.57	1.8	0.88	2.7	1.0	1.0	TRUE
August Total	**16.26**	**49.9**	**16.80**	**51.3**	**1.0**	**1.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
September 1, 2018	0.63	1.9	0.37	1.1	1.0	1.0	TRUE
September 2, 2018	0.88	2.7	0.75	2.3	1.0	1.0	TRUE
September 3, 2018	0.37	1.1	0.83	2.6	1.0	1.0	TRUE
September 4, 2018	0.75	2.3	0.71	2.2	1.0	1.0	TRUE
September 5, 2018	0.83	2.6	0.71	2.2	1.0	1.0	TRUE
September 6, 2018	0.71	2.2	0.89	2.7	1.0	1.0	TRUE
September 7, 2018	0.71	2.2	0.69	2.1	1.0	1.0	TRUE
September 8, 2018	0.89	2.7	0.64	2.0	1.0	1.0	TRUE
September 9, 2018	0.69	2.1	0.78	2.4	1.0	1.0	TRUE
September 10, 2018	0.64	2.0	0.74	2.3	1.0	1.0	TRUE
September 11, 2018	0.78	2.4	0.61	1.9	1.0	1.0	TRUE
September 12, 2018	0.74	2.3	0.71	2.2	1.0	1.0	TRUE
September 13, 2018	0.61	1.9	0.78	2.4	1.0	1.0	TRUE
September 14, 2018	0.71	2.2	0.64	2.0	1.0	1.0	TRUE
September 15, 2018	0.78	2.4	0.65	2.0	1.0	1.0	TRUE
September 16, 2018	0.64	2.0	0.71	2.2	1.0	1.0	TRUE
September 17, 2018	0.65	2.0	0.74	2.3	1.0	1.0	TRUE
September 18, 2018	0.71	2.2	0.64	2.0	1.0	1.0	TRUE
September 19, 2018	0.74	2.3	0.64	2.0	1.0	1.0	TRUE
September 20, 2018	0.64	2.0	0.87	2.7	1.0	1.0	TRUE
September 21, 2018	0.64	2.0	1.04	3.2	1.0	1.0	TRUE
September 22, 2018	0.87	2.7	0.67	2.1	1.0	1.0	TRUE
September 23, 2018	1.04	3.2	0.69	2.1	1.0	1.0	TRUE
September 24, 2018	0.67	2.1	0.62	1.9	1.0	1.0	TRUE
September 25, 2018	0.69	2.1	0.87	2.7	1.0	1.0	TRUE
September 26, 2018	0.62	1.9	0.74	2.3	1.0	1.0	TRUE
September 27, 2018	0.87	2.7	0.74	2.3	1.0	1.0	TRUE
September 28, 2018	0.74	2.3	0.80	2.4	1.0	1.0	TRUE
September 29, 2018	0.74	2.3	0.80	2.5	1.0	1.0	TRUE
September 30, 2018	0.80	2.4	0.62	1.9	1.0	1.0	TRUE
September Total	**21.78**	**66.8**	**21.69**	**67.0**	**1.0**	**1.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
October 1, 2018	0.80	2.5	0.62	1.9	1.0	1.0	TRUE
October 2, 2018	0.62	1.9	0.61	1.9	1.0	1.0	TRUE
October 3, 2018	0.62	1.9	0.28	0.9	1.0	1.0	TRUE
October 4, 2018	0.61	1.9	1.05	3.2	1.0	1.0	TRUE
October 5, 2018	0.28	0.9	0.52	1.6	1.0	1.0	TRUE
October 6, 2018	1.05	3.2	0.65	2.0	1.0	1.0	TRUE
October 7, 2018	0.52	1.6	0.58	1.8	1.0	1.0	TRUE
October 8, 2018	0.65	2.0	0.88	2.7	1.0	1.0	TRUE
October 9, 2018	0.58	1.8	0.51	1.6	1.0	1.0	TRUE
October 10, 2018	0.88	2.7	0.54	1.7	1.0	1.0	TRUE
October 11, 2018	0.51	1.6	0.78	2.4	1.0	1.0	TRUE
October 12, 2018	0.54	1.7	1.19	3.7	1.0	1.0	TRUE
October 13, 2018	0.78	2.4	2.04	6.3	1.0	1.0	TRUE
October 14, 2018	1.19	3.7	2.25	6.9	1.0	1.0	TRUE
October 15, 2018	1.30	4.0	1.28	3.9	1.0	1.0	TRUE
October 16, 2018	1.30	4.0	1.12	3.4	1.0	1.0	TRUE
October 17, 2018	1.28	3.9	0.71	2.2	1.0	1.0	TRUE
October 18, 2018	1.12	3.4	1.51	4.6	1.0	1.0	TRUE
October 19, 2018	0.71	2.2	0.80	2.4	1.0	1.0	TRUE
October 20, 2018	1.30	4.0	0.68	2.1	1.0	1.0	TRUE
October 21, 2018	0.80	2.4	0.65	2.0	1.0	1.0	TRUE
October 22, 2018	0.68	2.1	0.64	2.0	1.0	1.0	TRUE
October 23, 2018	0.65	2.0	1.89	5.8	1.0	1.0	TRUE
October 24, 2018	0.64	2.0	1.17	3.6	1.0	1.0	TRUE
October 25, 2018	1.30	4.0	0.86	2.6	1.0	1.0	TRUE
October 26, 2018	1.17	3.6	0.74	2.3	1.0	1.0	TRUE
October 27, 2018	0.86	2.6	0.70	2.1	1.0	1.0	TRUE
October 28, 2018	0.74	2.3	0.69	2.1	1.0	1.0	TRUE
October 29, 2018	0.70	2.1	1.04	3.2	1.0	1.0	TRUE
October 30, 2018	0.69	2.1	1.25	3.8	1.0	1.0	TRUE
October 31, 2018	1.04	3.2	2.44	7.5	1.0	1.0	TRUE
October Total	**25.91**	**79.5**	**30.67**	**94.2**	**1.0**	**1.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
November 1, 2018	1.25	3.8	1.29	4.0	1.0	1.0	TRUE
November 2, 2018	1.30	4.0	1.40	4.3	1.0	1.0	TRUE
November 3, 2018	1.29	4.0	1.79	5.5	1.0	1.0	TRUE
November 4, 2018	1.30	4.0	0.98	3.0	1.0	1.0	TRUE
November 5, 2018	1.30	4.0	0.80	2.5	1.0	1.0	TRUE
November 6, 2018	0.98	3.0	0.66	2.0	1.0	1.0	TRUE
November 7, 2018	0.80	2.5	1.20	3.7	1.0	1.0	TRUE
November 8, 2018	0.66	2.0	1.11	3.4	1.0	1.0	TRUE
November 9, 2018	1.20	3.7	0.64	2.0	1.0	1.0	TRUE
November 10, 2018	1.11	3.4	1.75	5.4	1.0	1.0	TRUE
November 11, 2018	0.64	2.0	1.40	4.3	1.0	1.0	TRUE
November 12, 2018	1.30	4.0	0.95	2.9	1.0	1.0	TRUE
November 13, 2018	1.30	4.0	1.09	3.3	1.0	1.0	TRUE
November 14, 2018	0.95	2.9	0.90	2.8	1.0	1.0	TRUE
November 15, 2018	1.09	3.3	0.98	3.0	1.0	1.0	TRUE
November 16, 2018	0.90	2.8	0.83	2.5	1.0	1.0	TRUE
November 17, 2018	0.98	3.0	0.95	2.9	1.0	1.0	TRUE
November 18, 2018	0.83	2.5	0.98	3.0	1.0	1.0	TRUE
November 19, 2018	0.95	2.9	1.01	3.1	1.0	1.0	TRUE
November 20, 2018	0.98	3.0	0.92	2.8	1.0	1.0	TRUE
November 21, 2018	1.01	3.1	0.82	2.5	1.0	1.0	TRUE
November 22, 2018	0.92	2.8	0.84	2.6	1.0	1.0	TRUE
November 23, 2018	0.82	2.5	0.80	2.4	1.0	1.0	TRUE
November 24, 2018	0.84	2.6	0.78	2.4	1.0	1.0	TRUE
November 25, 2018	0.80	2.4	0.98	3.0	1.0	1.0	TRUE
November 26, 2018	0.78	2.4	0.78	2.4	1.0	1.0	TRUE
November 27, 2018	0.98	3.0	0.79	2.4	1.0	1.0	TRUE
November 28, 2018	0.78	2.4	0.73	2.2	1.0	1.0	TRUE
November 29, 2018	0.79	2.4	0.99	3.0	1.0	1.0	TRUE
November 30, 2018	0.73	2.2	1.56	4.8	1.0	1.0	TRUE
November Total	**29.56**	**90.7**	**30.70**	**94.1**	**1.0**	**1.0**	**TRUE**

Table 4 - Allowable Reuse Diversion and Actual Diversion

(4.1) Date	Total Allowable Reuse Diversion (If Streamflow Conditions Met)		Actual Reuse Diversion		(4.6) Streamflow at Gauge Downstream of Diversion (cfs)	(4.7) Bypass Requirement for Environmental Flow (cfs)	(4.8) Bypass Requirement Met in All Days?
	(4.2) (Million gallons)	(4.3) (Acre-Feet)	(4.4) (million Gallons)	(4.5) (Acre-Feet)			
December 1, 2018	0.99	3.0	0.97	3.0	1.0	1.0	TRUE
December 2, 2018	1.30	4.0	0.88	2.7	1.0	1.0	TRUE
December 3, 2018	0.97	3.0	0.94	2.9	1.0	1.0	TRUE
December 4, 2018	0.88	2.7	0.84	2.6	1.0	1.0	TRUE
December 5, 2018	0.94	2.9	1.39	4.3	1.0	1.0	TRUE
December 6, 2018	0.84	2.6	3.01	9.2	1.0	1.0	TRUE
December 7, 2018	1.30	4.0	1.61	5.0	1.0	1.0	TRUE
December 8, 2018	1.30	4.0	1.06	3.2	1.0	1.0	TRUE
December 9, 2018	1.30	4.0	0.84	2.6	1.0	1.0	TRUE
December 10, 2018	1.06	3.2	0.83	2.5	1.0	1.0	TRUE
December 11, 2018	0.84	2.6	0.85	2.6	1.0	1.0	TRUE
December 12, 2018	0.83	2.5	1.05	3.2	1.0	1.0	TRUE
December 13, 2018	0.85	2.6	1.00	3.1	1.0	1.0	TRUE
December 14, 2018	1.05	3.2	1.02	3.1	1.0	1.0	TRUE
December 15, 2018	1.00	3.1	1.00	3.1	1.0	1.0	TRUE
December 16, 2018	1.02	3.1	0.97	3.0	1.0	1.0	TRUE
December 17, 2018	1.00	3.1	1.06	3.2	1.0	1.0	TRUE
December 18, 2018	0.97	3.0	0.96	2.9	1.0	1.0	TRUE
December 19, 2018	1.06	3.2	0.89	2.7	1.0	1.0	TRUE
December 20, 2018	0.96	2.9	0.89	2.7	1.0	1.0	TRUE
December 21, 2018	0.89	2.7	0.81	2.5	1.0	1.0	TRUE
December 22, 2018	0.89	2.7	0.78	2.4	1.0	1.0	TRUE
December 23, 2018	0.81	2.5	0.70	2.1	1.0	1.0	TRUE
December 24, 2018	0.78	2.4	0.68	2.1	1.0	1.0	TRUE
December 25, 2018	0.70	2.1	2.27	7.0	1.0	1.0	TRUE
December 26, 2018	0.68	2.1	1.56	4.8	1.0	1.0	TRUE
December 27, 2018	1.30	4.0	0.62	1.9	1.0	1.0	TRUE
December 28, 2018	1.30	4.0	0.92	2.8	1.0	1.0	TRUE
December 29, 2018	0.62	1.9	1.57	4.8	1.0	1.0	TRUE
December 30, 2018	0.92	2.8	1.49	4.6	1.0	1.0	TRUE
December 31, 2018	1.30	4.0	1.12	3.4	1.0	1.0	TRUE
December Total	**30.61**	**93.9**	**34.54**	**106.0**	**1.0**	**1.0**	**TRUE**