August 15, 2023

Texas Commission on Environmental Quality
Water Supply Division, Water Rights Permitting MC-160
P.O. Box 13087
Austin, Texas 78711-3087

RE: Gibbons Tract 1, LP, Application to Amend Certificate of Adjudication No. 12-5311

Water Rights Permitting Team:

On behalf of the partners of the Gibbons Tract 1, LP, I am pleased to submit the following application package requesting an amendment to Certificate of Adjudication No. 12-5311 to add a bed and banks authorization to deliver water released from Gibbons Creek Reservoir. The application package includes the following:

- Administrative Information Checklist
- Administrative Information Report
- Written Evidence of Signature Authority
- Technical Information Report, Water Rights Permitting (with Worksheets)
- Water Lease Agreement between Gibbons Tract 1, LP and The Dow Chemical Company
- Statement 1, Supplemental Attachment to Administrative Information Report, Summary of Request
- Statement 2, Supplemental Attachment to Technical Information Report, Addendum Regarding the Regional and State Water Plans
- Statement 3, Supplemental Attachment to Worksheet 1.2, Marshall Criteria
- Statement 4, Supplemental Attachment to Worksheets 3.0 and 4.0
- Statement 5, Supplemental Attachment to Worksheet 5.0
- Statement 6, Supplemental Attachment to Worksheet 6.0, Water Conservation/Drought Contingency Plans
- Water Conservation and Drought Contingency Plans for The Dow Chemical Company
- Maps 1, 2, and 3 showing the subject discharge points, diversion reach, and diversion points.

Finally, a check for $180.00 in payment of the water rights application and notice fees will be sent with a hard copy of this application package.

The partners of the Gibbons Tract 1, LP and I look forward to working with the Commission on this permit application and thank you for your time and cooperation.

Sincerely,

HDR Engineering, Inc.

David D. Dunn, PE
Vice President

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): Gibbons Tract 1, LP

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

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

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) 239-4600.

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

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

_____New Appropriation of State Water

__X__Amendment to a Water Right *

__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."

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?

Gibbons Tract 1, LP

(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 : CN605994854 (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: Christine Lagerlef

Title: Treasurer

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

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

Name: Gibbons Tract 1 Water Rights, LP

Mailing Address: 162 Private Road 5743

City: Thornton State: Texas ZIP Code: 76687

Indicate an X next to the type of Applicant:

___Individual	___Sole Proprietorship-D.B.A.
_X_Partnership	___Corporation
___Trust	___Estate
___Federal Government	___State Government
___County Government	___City Government
___Other Government	___Other_____

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

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: David Dunn

Title: Vice President

Organization Name: HDR Engineering, Inc.

Mailing Address: 4401 West Gate Blvd., Suite 400

City: Austin State: Texas ZIP Code: 78745

Phone Number: (512) 791-3671

Fax Number: n/a

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 Number: _____

Fax Number: _____

E-mail Address: _____

5. MISCELLANEOUS INFORMATION (Instructions, Page. 9)

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

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

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

   Account number: n/a Amount past due: n/a

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: n/a Amount past due: n/a

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. Applicants may check their status with the Comptroller at https://mycpa.cpa.state.tx.us/coa/
   Is the Applicant or Co-Applicant in good standing with the Comptroller? **Yes / No** Yes

c. The commission will not grant an application for a water right unless the applicant has submitted all Texas Water Development Board (TWDB) surveys of groundwater and surface water use – if required. See TWC §16.012(m) and 30 TAC § 297.41(a)(5). Applicants should check survey status on the TWDB website prior to filing: https://www3.twdb.texas.gov/apps/reports/WU/SurveyStatus_PriorThreeYears

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

6. SIGNATURE PAGE (Instructions, Page. 11)

Applicant:

I, CHRISTINE LAGERLEF TREASURER
(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: Christine Lagerlef Date: 8/15/23
(Use blue ink)

Subscribed and Sworn to before me by the said

on this 15th day of August, 2023.

My commission expires on the 08th day of August, 2024.

Diana Kelly

Notary Public

Leon

County, Texas

[SEAL]

DIANA KELLY
NOTARY PUBLIC STATE OF TEXAS
MY COMM. EXP. 08/18/2024
NOTARY ID 676799-2

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

Gibbons Lake and Land, LLC
11801 Private Road 4340
Normangee, Tx 77871
210-900-6702

November 28, 2022

Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

To Whom It May Concern,

Gibbons Lake and Land, LLC, owner and managing partner of Gibbons Tract 1, LP, authorizes Mrs. Christine Lagerlef, Treasurer of the partnership, to act on behalf of Gibbons Lake and Land, LLC to execute all documents to amend Certificate of Adjudication No. 12-5311 and Certificate of Adjudication No. 12-5307 for Gibbons Tract 1, LP and any other business the partnership needs to conduct with the Texas Commission on Environmental Quality.

Sincerely,

James Dixon
President
Gibbons Lake and Land, LLC

TECHNICAL INFORMATION REPORT
WATER RIGHTS PERMITTING

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

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

Date of pre-application meeting: 8/11/23

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: n/a)

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

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: n/a)

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

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

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

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

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

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

Water Right (Certificate or Permit) number you are requesting to amend: CA 12-5311 (as amended)

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** N
If yes, submit:

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

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

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

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

Additionally, all amendments require:

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

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

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

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** 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.

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":

See Statement 2
Supplemental Attachment to Technical Information Report
Addendum Regarding the Regional and State Water Plans

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

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

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

WORKSHEET 1.0
Quantity, Purpose and Place of Use

1. New Authorizations (Instructions, Page. 16)

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

Quantity (acre-feet) (*Include losses for Bed and Banks*)	**State Water Source (River Basin) or Alternate Source** *each *alternate source* (*and new appropriation based on return flows of others*) *also requires completion of Worksheet 4.0*	**Purpose(s) of Use**	**Place(s) of Use** **requests to move state water out of basin also require completion of Worksheet 1.1 Interbasin Transfer*
9,740	Brazos River Basin	Industrial, Municipal	Brazoria County, TX Galveston County, TX

9,740 Total amount of water (in acre-feet) to be used annually (*include losses for Bed and Banks applications*)

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

a. Location Information Regarding the Lands to be Irrigated

i) Applicant proposes to irrigate a total of n/a 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 n/a acres in n/a County, TX.

ii) Location of land to be irrigated: In the n/a Original Survey No. n/a, Abstract No. n/a.

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**

**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 n/a 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 n/a acres in n/a County, TX.

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

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

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

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

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

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

WORKSHEET 1.1
INTERBASIN TRANSFERS, TWC § 11.085

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

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

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

a. Provide the Basin of Origin._____

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

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

_____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WORKSHEET 1.2
NOTICE. "THE MARSHALL CRITERIA"

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

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

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

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

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

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

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

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

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

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

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

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

See Statement 3
Supplemental Attachment to Worksheet 1.2
Marshall Criteria

n/a

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:_____

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)

i. Applicant has verified on-channel or off-channel determination by contacting Surface Water Availability Team at (512) 239-4600? **Y / N**_____
ii. If on-channel, will the structure have the ability to pass all State Water inflows that Applicant does not have authorization to impound? **Y / N**_

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) 239-4600).*

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***

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

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

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** 630 "max diversion rate of CA 12-5328" cfs (cubic feet per second) or 282,764 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* 630 cfs or 282,764 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 n/a sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4600, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Brazos River

b. Zip Code: 77515

c. Location of point: In the William Harris League Original Survey No. _____, Abstract No. 71, Brazoria 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 29.255479 °N, Longitude 95.567988 °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): Description of diversion reach in CA 12-5328C

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

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

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. 1 Downstream Limit of Diversion Reach No.

b. Maximum Rate of Diversion for **this new point** 630 cfs (cubic feet per second) or 282,764 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* 630 cfs or 282,764 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 n/a sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4600, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Brazos River

b. Zip Code: 77515

c. Location of point: In the William Harris League Original Survey No. _____, Abstract No. 71, Brazoria 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 29.228856 °N, Longitude 95.540618 °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): Description of diversion reach in CA 12-5328C

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

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

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. 1 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** unspecified cfs (cubic feet per second) or unspecified gpm (gallons per minute) Note that the diversion rate from Harris Reservoir is unspecified in CA 12-5328.

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* n/a cfs or n/a gpm

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

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

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

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

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 n/a sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4600, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): off-channel Harris Reservoir

b. Zip Code: 77515

c. Location of point: In the William Harris Grant Original Survey No. _____, Abstract No. 104, Brazoria 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 29.246428 °N, Longitude 95.529806 °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 Maps

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

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

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** 740 cfs (cubic feet per second) or 333,000 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* n/a cfs or n/a 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	Existing
	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 n/a sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4600, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): Existing reservoir on Oyster Creek authorized by CA 12-5328

b. Zip Code: 77566

c. Location of point: In the Jared E. Grace Grant Original Survey No. _____, Abstract No. 66, Brazoria 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 29.053883 °N, Longitude 95.464592 °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

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

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

WORKSHEET 4.0
DISCHARGE INFORMATION

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

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

b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 5.80 (% or amount) and explain the method of calculation: Cumulative delivery factor from control point 531131 to control point 532801 in Brazos WAM data file.

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

1. The TPDES Permit Number(s). n/a (attach a copy of the **current** TPDES permit(s))
2. Applicant is the owner/holder of each TPDES permit listed above? **Y / N** n/a

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

3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").
4. The percentage of return flows from groundwater n/a, surface water n/a?
5. If any percentage is surface water, provide the base water right number(s) n/a.

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

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

n/a

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

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

dii. Identify any other source of the water n/a

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

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

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 9,740 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 1,000 cfs or 448,831 gpm.

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

d. Zip Code 77861

e. Location of point: In the Philip Goodbread Original Survey No. _____, Abstract No. 223, Grimes County, Texas.

f. Point is at:

Latitude 30.609507 °N, Longitude 96.065169 °W.

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

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

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

WORKSHEET 4.0
DISCHARGE INFORMATION

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

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

b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 0.73 (% or amount) and explain the method of calculation: Loss for reach obtained from application No. 13926 for BASF Corporation.

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

1. The TPDES Permit Number(s). n/a (attach a copy of the **current** TPDES permit(s))
2. Applicant is the owner/holder of each TPDES permit listed above? **Y / N** n/a

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

3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0").
4. The percentage of return flows from groundwater n/a, surface water n/a?
5. If any percentage is surface water, provide the base water right number(s) n/a.

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

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

n/a

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

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

dii. Identify any other source of the water n/a

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

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

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 9,740 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses. Note that the diversion rate from Harris Reservoir is unspecified in CA 12-5328.

b. Water will be discharged at this point at a maximum rate of unspecified cfs or n/a gpm.

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

d. Zip Code 77515

e. Location of point: In the William Harris Grant Original Survey No. _____, Abstract No. 104, Brazoria County, Texas.

f. Point is at:

Latitude 29.246428 °N, Longitude 95.529806 °W.

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

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

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

WORKSHEET 5.0
ENVIRONMENTAL INFORMATION

1. Impingement and Entrainment

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

Diversion Reach No. 2, Diversion Point No. 3, and Diversion Point No. 4 are authorized by CA 12-5328.

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

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

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

a. Identify the appropriate description of the water body.

☒ Stream

☐ Reservoir

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

☐ 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

e. 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 mapsubmitted with the application indicating the location of the photograph and the direction of the shot.

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

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

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

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

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

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

a. For all bed and banks applications:

i. Submit an assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements. See Statement 5, Supplemental Attachment to Worksheet 5.0.

b. For all alternate source applications:

i. If the alternate source is treated return flows, provide the TPDES permit number n/a

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

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

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

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

WORKSHEET 6.0
Water Conservation/Drought Contingency Plans

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

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

1. Water Conservation Plans

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

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

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

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

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

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

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

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

1. __X__ Municipal Use. See 30 TAC § 288.2. **

2. __X__ 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 n/a

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** n/a

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. X 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** n/a

See Statement 6
Supplemental Attachment to Worksheet 6.0
Water Conservation/Drought Contingency Plans

WORKSHEET 7.0
ACCOUNTING PLAN INFORMATION WORKSHEET

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

1. Is Accounting Plan Required

Accounting Plans are generally required:

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

2. Accounting Plan Requirements

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

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

WORKSHEET 8.0
CALCULATION OF FEES

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

1. NEW APPROPRIATION

	Description	Amount ($)
Filing Fee	Circle fee correlating to the total amount of water* requested for any new appropriation and/or impoundment. Amount should match total on Worksheet 1, Section 1. Enter corresponding fee under **Amount ($).** <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) 239-4600.	
	TOTAL	$

2. AMENDMENT *OR* SEVER AND COMBINE

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

3. BED AND BANKS

	Description	Amount ($)
Filing Fee		$100.00
Recording Fee		$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	$ 67.50
	TOTAL INCLUDED	$ 180.00

WATER RIGHTS LEASE

This Water Rights Lease ("Lease"), effective as of the latter of the signature dates below (the "Effective Date"), by and between the Gibbons Tract 1 Water Rights, LP, a Texas limited partnership ("Lessor") and The Dow Chemical Company, a Delaware corporation ("Lessee"), collectively referred to hereafter as the "Parties," or individually, as a "Party."

RECITALS

WHEREAS, Lessee has identified a need to lease surface water rights for use in its industrial operations in Brazoria County, Texas; and

WHEREAS, Lessor has surface water rights available for lease under Certificate of Adjudication Nos. 12-5311 and 12-5311A from Gibbons Creek Reservoir in Grimes County; and

WHEREAS, Lessor also has surface water rights under Certificate of Adjudication Nos. 12-5307 and 5307A from the Navasota River; and

WHEREAS, the Parties, in their mutual interest, wish to enter into a lease to authorize Lessee's downstream diversion and use of Lessor's water rights; and

NOW THEREFORE, in consideration of the mutual covenants hereinafter set forth and other good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree as follows:

1. **Grant of Lease.** Subject to legal and physical availability, and other terms and conditions of this Lease and the underlying Certificates of Adjudication, Lessor hereby leases to Lessee a portion of the surface water rights under Certificate of Adjudication Nos. 12-5311 and 12-5311A from Gibbons Creek Reservoir in Grimes County and Certificate of Adjudication Nos. 12-5307 and 5307A from the Navasota River.

2. **Volume of Water, Diversion Point and Curtailment.**

   (a) Volume, Rate, and Diversion Point. Lessor will lease 8,090 acre-feet of surface water rights to Lessee per year during the Term of this Lease, to be released from Gibbons Creek Reservoir at a rate not to exceed 1,000 cubic feet per second and diverted at Lessee's diversion point located in Brazoria County, subject to the terms of this Lease. Lessee's specific diversion point is more particularly described in Exhibit A, which is attached hereto and incorporated herein for all purposes.

   (b) Curtailment and Losses. Notwithstanding any other provision herein, the amount of water available for diversion by Lessee may be curtailed as required by law or Texas Commission on Environmental Quality ("TCEQ") rules, including curtailments required by the TCEQ or the Brazos Watermaster, and Lessee bears all carriage losses from Gibbons Creek Reservoir to Lessee's diversion point. Lessee acquires no

property right in the water made available to it under this Lease beyond the right to have the water made available to it for diversion and use under the terms of this Lease.

(c) Augmentation of Supply. In the event both Parties agree that augmentation of storage in Gibbons Creek Reservoir will increase the reliability of supplies, the Parties agree that Lessor's Navasota River diversion authority under Certificate of Adjudication Nos. 12-5307 and 12-5307A may be used to augment the water available to Lessee. Upon written agreement by both Parties, Lessor may pump as much water as possible and available under Certificate of Adjudication Nos. 12-5307 and 12-5307A to augment its Gibbons Creek Reservoir supply. All costs incurred by Lessor in augmenting the water available to Lessee under this subsection shall be provided to Lessee quarterly in a detailed accounting statement, and Lessee shall reimburse Lessor for one-half of the costs incurred within sixty (60) days of receipt of the accounting statement.

(d) Reuse. All rights to reuse of the water made available under this Lease that is either disposed of or discharged or otherwise allowed to flow into a watercourse, reservoir, or other body of state-owned water shall remain with Lessor. Lessee shall not use, sell, or make available to third parties any form of reuse of the water made available under this Lease without the express written consent of Lessor, which consent will not be unreasonably withheld, delayed, or conditioned.

3. **Term.** This Lease begins on the Effective Date and ends, unless terminated earlier as set forth herein, at 11:59 p.m., Central Standard Time, on December 31, 2027 (the "Term"). Reference to the use of water or payment "per year" in this Lease shall mean the time period of January 1st through December 31st of a calendar year.

4. **Diversion, Use of Water and Regulatory Approval.**

(a) Purpose of Use. Lessee represents, and Lessor relies on such representation, that all water to be made available and used by Lessee shall be used solely for industrial purposes.

(b) TCEQ Amendment. Lessor shall apply for amendments to Certificate of Adjudication Nos. 12-5311, 12-5311A, 12-5307 and 12-5307A as necessary to authorize Lessee's use of the water. Lessor's amendments shall include requests to change the purpose of use to multi-use and to add Lessee's diversion point in Exhibit A. Lessor anticipates the addition of Lessee's diversion point will require a "bed and banks" amendment by TCEQ, and will involve significant time and expense by Lessor to obtain. Lessee shall reimburse Lessor for Lessor's expenses associated with the amendments, not to exceed Thirty-Thousand and 00/100s Dollars ($30,000.00). Such reimbursement shall be made by Lessee within sixty (60) days of receipt of an invoice delivered by Lessor.

(c) Partial Approval by TCEQ. Any partial approval by TCEQ that authorizes an amount less than the 8,090 acre-feet set forth in Section 1 shall not invalidate this Lease, and the amount of water leased under Section 1 and paid for under Section 5 shall be

adjusted to reflect the volume approved by TCEQ. All references to 8,090 acre-feet used in this Lease shall also be adjusted and conform to the amount authorized by TCEQ, if necessary.

(d) Facilities and Meter. The provision of facilities for diversion of the water agreed to be made available hereunder shall be the sole responsibility of Lessee, including the right to legally access land to place such facilities. Lessee, at its own cost and expense, shall own, install, operate and maintain meters for the accurate measuring of all water diverted under this Lease in order to aid Lessor in accurately reporting water usage to TCEQ as required by applicable law or regulation. Lessee shall allow Lessor, TCEQ, or the Brazos Watermaster access to the meter in order to verify accuracy. Lessee shall keep accurate records of the meter readings required herein, and shall make all records available for inspection to Lessor, TCEQ, or the Brazos Watermaster.

[redacted]

5. **Payment for Leased Water.**

(a) Payment Options Prior to TCEQ Bed and Banks Amendment Approval. Total payment per each year of this Lease prior to receipt of the "bed and banks" permit approval by TCEQ shall be by one of the following methods as determined by Lessee, as follows:

[redacted]

[redacted]

(ii) Post-Bed and Banks Structure Reservation Rate. Lessee shall pay Lessor

[redacted]

(b) Payment Upon TCEQ Bed and Banks Amendment Approval. Total payment per

[redacted]

(d) Annual Payment Due Date. Lessee shall remit the first (2023) annual payment to Lessor not later than twenty (20) business days after the Effective Date of this Lease. Annual payments made thereafter shall be remitted to Lessor not later than January 15th of each calendar year during the Term. Payment shall be made to Lessor at the address set forth in Section 7.

(e) Prorated Payments. Any partial approval by TCEQ of the permit amendment reducing the total volume of leased water under Section 1 shall result in a prorated reduction of payment to reflect the TCEQ approved volume. If the amount owed to Lessor changes under Subsections (a) or (b) of this Section 5 during a calendar year, Lessee shall pay the prorated balance owed to Lessor within sixty (60) days of delivery of written notice from Lessor of the balance owed based on the change.

(f) Unconditional Obligation to Pay. Lessee unconditionally agrees to pay Lessor annually for the water to be made available to Lessee hereunder at the applicable price under this Section 5 regardless of whether the full amount of water under Section 1 is diverted and used by Lessee.

(g) Interest for Late Payments. In the event of failure of Lessee to make any payment to Lessor provided to be made under this Lease at the time when the payment is due, the past due payment shall bear interest at the rate of two percent (2%) per each 30-day period that payment is past due, not to exceed 18 percent (18%) per year.

6. **Governmental Compliance.** Lessee shall comply with all laws, regulations, and orders, including but not limited to those rules and orders of the TCEQ and Brazos Watermaster, related to Lessee's activities under this Lease. Lessee shall be solely responsible for all diversions and use of Lessor's leased water rights.

7. **Notices.** Any notice, request, or demand provided for in this Lease shall be in writing and shall be considered to have been duly delivered when sent by registered mail or certified mail to the addresses set forth below. Contact by phone or email may be utilized as necessary to effectuate the purposes of this Lease at the information set forth below, except that phone or email shall not be used to provide official or written notice required herein.

Any such notice to Lessor:
Gibbons Tract 1 Water Rights, LP

[redacted]

With required copy to:

Kristen Fancher
Fancher Legal, PLLC
6136 Frisco Square Blvd., Suite 400
Frisco, Texas 75034

Any such notice to Lessee:

The Dow Chemical Company

[redacted]

Either Party may change the address or other contact information for notice to it by giving notice of such change in accordance with the provisions of this section.

8. **Force Majeure.** Notwithstanding anything to the contrary in this Lease, neither Party hereto shall be liable to the other or deemed in default with respect to its obligations under this Lease for any failure to perform or for delay in performing such Party's obligations hereunder (except for the obligation to pay money) where such failure or delay is due to force majeure, while and to the extent that such performance is prevented by such cause. The term force majeure as used herein shall mean acts of God, fire, storm, flood, war, terrorist activity, riots, sabotage, major infrastructure failure, drought, lack of availability of water due to sedimentation, low inflows of water to, or lack of water supply in the water basin, strikes or other differences with labor (whether or not within the power of the Party to settle same), decrees, actions or orders of the courts or other governmental authority, or other similar causes not within the reasonable control of such Party and not due to negligence of the Party. Each Party shall use due diligence to resume performance of any obligation suspended by force majeure at the earliest practicable time.

9. **INDEMNITY AND HOLD HARMLESS CLAUSE.** TO THE EXTENT AUTHORIZED BY LAW, LESSEE AND LESSEE'S OFFICERS, DIRECTORS, EMPLOYEES, AFFILIATE COMPANIES, ASSIGNEES, CONSULTANTS, AND AGENTS SHALL INDEMNIFY AND HOLD LESSOR AND LESSOR'S OFFICERS, DIRECTORS, EMPLOYEES, AFFILIATE COMPANIES, ASSIGNEES, CONSULTANTS, AND AGENTS HARMLESS FROM ANY AND ALL LIABILITY, CLAIMS, JUDGMENTS, ORDERS, CAUSES OF ACTION, COSTS, EXPENSES OR DEMANDS RESULTING FROM LESSEE'S DIVERSION OF WATER HEREUNDER OR ANY NEGLIGENT ACT OR OMISSION RELATED TO THE PROVISION OF WATER MADE AVAILABLE UNDER THIS LEASE.

10. **Miscellaneous.**

    (a) Severability. The Parties hereto agree that if any of the provisions of this Lease contravene or are held invalid under the laws of the State of Texas, such invalid provision shall not invalidate the entire Lease, and the Lease shall be construed as though not containing that particular provision, with the rights and obligations of the Parties to be construed and in force accordingly.

(b) Headings. The captions and headings appearing in this Lease are used merely to facilitate reference and will have no bearing upon its interpretation.

(c) Covenant of Good Faith and Fair Dealings. The Parties agree to cooperate and to deal with one another fairly and in good faith at all times to effectuate the purposes and intent of this Lease. The Parties also agree to execute and deliver such further documents or instruments and to perform such further acts as are reasonably necessary to effectuate the purposes and intent of this Lease.

(d) Governing Law. This Lease shall be construed in accordance with and governed by the laws of the State of Texas without regard to principles of conflicts of laws. The Parties agree that the Lease is executed and fully performable in Grimes County, Texas.

(e) Assignment; No Third Party Beneficiaries. This Lease will be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns only. This Lease may be transferred or assigned to affiliated entities or upon a sale of a Party or its assets; provided, however that this Lease shall not be transferred or assigned by either Party to a third party unaffiliated entity or person without the prior written consent of the other Party, which consent will not be unreasonably withheld, delayed, or conditioned. Except as otherwise provided herein, nothing in this Lease, express or implied, confers any rights or remedies on any person or entity not a Party hereto other than the successors and assigns of the Parties hereto.

(f) Entire Agreement. This Lease and Exhibit A attached hereto constitute the entire agreement and understanding between the Parties hereof. No provision of this Lease may be changed, modified, waived or discharged orally, and no change, modification, waiver or amendment of any provision will be effective except by separate written instrument to be executed and approved by the Parties hereto.

(g) Waiver. Unless specifically waived in express terms herein, no failure on the part of either Party to this Lease to require the performance by the other Party of any portion of this Lease will in any way affect either Party's right to enforce such provision, nor will any waiver by either Party be taken or held to be a waiver of any other provision. No rights under this Lease may be waived except by separate written agreement executed by both Parties.

(h) Default and Termination. In the event of a default by a Party hereunder, including nonpayment, that continues for a period of thirty (30) days or more, the non-defaulting Party shall give written notice to the defaulting Party of the claimed default and request that such default be remedied with all reasonable dispatch. In the event that the defaulting Party has not cured such default within thirty (30) days after the receipt of such notice, the non-defaulting Party may terminate this Lease and pursue all available remedies against the defaulting Party available in law and equity. In the event of termination of this Lease, Lessee shall immediately discontinue all diversions and use of water made available hereunder.

(i) Counterparts. This Lease may be executed in multiple counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

(SIGNATURES ON NEXT PAGE)

IN WITNESS WHEREOF, each Party has signed this Lease or caused this Lease to be signed in its corporate name by its officer thereunto duly authorized.

LESSOR:

Gibbons Tract 1 Water Rights, LP,
a Texas limited partnership

By: Gibbons Lake and Land, LLC, its General Partner

By: _____
Name: James Dixon
Title: President
Date: 5.31.2023

STATE OF TEXAS §
§
COUNTY OF Grimes §

This instrument was acknowledged before me on this the 31 day of May, 2023, by James Dixon, President of Gibbons Tract 1 Water Rights, LP, a Texas limited partnership, on behalf of said company, for the purposes and consideration therein expressed.

DEANNA SMITH
Notary Public, State of Texas
Comm. Expires 03-30-2024
Notary ID 132420021

5/31/2023

LESSEE:

The Dow Chemical Company

By: _____
Name: Terrance Cravin
Title: Sr. Production Director
Date: 6/7/2023

STATE OF TEXAS §
§
COUNTY OF Brazoria §

This instrument was acknowledged before me on this the 7th day of June, 2023, by Terrance Cravin, Sr. Production Director of The Dow Chemical Company, on behalf of said company, for the purposes and consideration therein expressed.

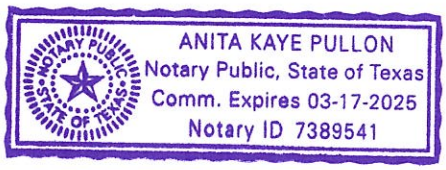
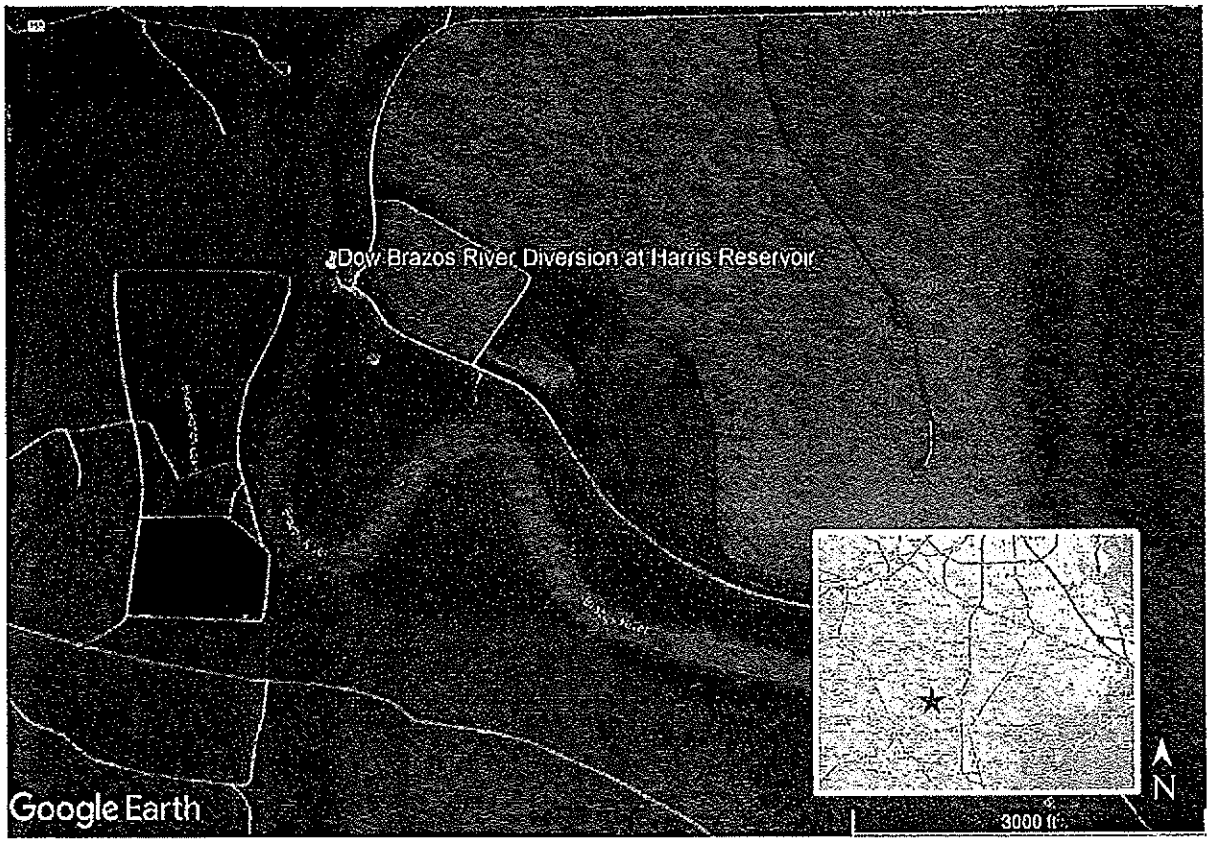


EXHIBIT A

Location of Dow Brazos River Diversion at Harris Reservoir in Brazoria County (Latitude 29°14'36.10"N, Longitude 95°33'44.10"W)



STATEMENT 1

SUPPLEMENTAL ATTACHMENT TO ADMINSTRATIVE INFORMATION REPORT

SUMMARY OF REQUEST

The Gibbons Creek Steam Electric Station has been decommissioned and dismantled. Gibbons Creek Reservoir, the associated Certificate of Adjudication No. 12-5311, as amended, and adjacent property were purchased by Gibbons Tract 1, LP. A Change of Ownership for CA 12-5311 was completed March 25, 2022. The new owners wish to utilize the resource of the reservoir and associated water right to provide much needed water supply in the Brazos Basin. They have entered into an agreement to provide water from Gibbons Creek Reservoir to Dow Chemical for municipal and industrial uses to supplement Dow's supplies from CA 12-5328 and contractual purchases from the Brazos River Authority.

This water right amendment application seeks to add the necessary diversion points and diversion reaches authorized under CA 12-5328C and to utilize the bend and banks of Gibbons Creek, the Navasota River, the Brazos River, and Oyster Creek to transport water released from Gibbons Creek Reservoir.

OTHER PROVISIONS REQUESTED TO CHANGE

None

STATEMENT 2

SUPPLEMENTAL ATTACHMENT TO TECHNICAL INFORMATION REPORT

ADDENDUM REGARDING THE REGIONAL AND STATE WATER PLANS

At the time of publication of the 2021 Brazos G Regional Water Plan and the 2022 State Water Plan, the plans for retirement of the Gibbons Creek Steam Electric Station were not finalized and supplies from the Gibbons Creek Reservoir are currently identified as an existing supply for steam-electric power in Grimes County in the Brazos G Water Planning Area. Supply from Gibbons Creek Reservoir is identified as an alternative water supply initiative for the City of Bryan (municipal use) in Table 7-9 on page 7-44 of the 2021 Brazos G Regional Water Plan.

Demands associated with the Gibbons Creek Steam Electric Station are not included in the draft demands for the 2026 Brazos G Regional Water Plan.

https://www.twdb.texas.gov/waterplanning/data/projections/2027/doc/SupportingData_SteamElectric_Jan2022.xlsx

The supply from the reservoir likely will be recommended for use by other water user groups located in the Brazos G Water Planning Area and/or the Region H Water Planning Area. This change of use in the regional water plans is consistent with the treatment of the water supply from the decommissioned facilities at the former Alcoa site, where steam-electric supplies are recommended for other uses in the 2021 Brazos G Regional Water Plan because it was known to the planning group that power generation had ceased. See page 5.25-7 in the 2021 Brazos G Regional Water Plan.

The 2021 Region H Water Plan shows needs of 27,855 acre-feet per year in 2070 in Brazoria County for manufacturing and supplies from Gibbons Creek Reservoir could be used to meet some of those needs.

Hence, the requested bed and banks authorization is not inconsistent with the current Brazos G and Region H Water Plans or the current State Water Plan.

STATEMENT 3

SUPPLEMENTAL ATTACHMENT TO WORSHEET 1.2

MARSHALL CRITERIA

a. Administrative Requirements and Fees.
This application meets the administrative requirements for an amendment to a water right. This application includes required items that are listed in the TCEQ Water Rights Permitting Application Administrative Information Checklist.

b. Beneficial Use.
The proposed amendment will allow beneficial use of the water supply for municipal and industrial purposes through an existing water supply contract. This amendment will allow continued beneficial use of this resource that is currently restricted to forced evaporative cooling at the decommissioned power plant.

c. Public Welfare.
No adverse effects of the proposed amendment on the public welfare are expected, including no adverse effects on the well-being of humans and the environment, as this water will be put to beneficial use for municipal and industrial purposes.

d. Groundwater Effects.
No effects of the proposed amendment on groundwater or groundwater recharge are expected.

e. State Water Plan.
The proposed amendment will make additional water available for use by water user groups in the Brazos G and Region H Water Planning Areas that will not be available without the amendment.

f. Waste Avoidance.
Applicant agrees that the amended water right can include special conditions requiring adoption of water conservation and drought contingency plans by users of the water prior to use of the water. Each water conservation plan will include monitoring and conservation practices that include quantified conservation goals applicable to the beneficial uses permitted by this proposed water right amendment. For uses that require it, a drought contingency plan will be provided upon commencement of that use.

The contractual customer of the water is Dow Chemical, who will maintain water conservation and drought contingency plans as required pursuant to Dow's current uses under CA 12-5328.

g. Impacts on Water Rights or On-Stream Environment.
The proposed amendment does not request additional water, storage, or rates of diversion. The proposed amendment requests to use existing permitted water legally impounded under an existing permit for a different use in a different location. No detrimental impacts to water right holders, Gibbons Creek Reservoir, or to the on-stream environment are expected. Contractual

deliveries pursuant to this requested amendment are expected to increase instream flows in the bed and banks of the Brazos River and its tributaries between Gibbons Creek Reservoir and the diversion reach as this water was historically consumed at Gibbons Creek Reservoir.

STATEMENT 4

SUPPLEMENTAL ATTACHMENT TO WORSHEETS 3.0 and 4.0

DIVERSION PLAN

See Maps 1, 2, and 3 for locations of diversion reaches, diversion points, and discharge points.

Diversion rates on Worksheet 3.0 for Diversion Reach No. 1, Diversion Point No. 3, and Diversion Point No. 5 are as authorized by CA 12-5328.

DIVERSION PLAN

Point Description	Explanation
Discharge Point 1	Water will be released through the gates of Gibbons Creek Reservoir and travel down the bed and banks of Gibbons Creek, then the Navasota River, then the Brazos River to Diversion Reach No. 1.
Upstream Limit of Diversion Reach No. 1	Water released from Gibbons Creek Reservoir at Discharge Point No. 1 will be diverted from the Brazos River at existing Diversion Reach No. 1 authorized by CA 12-5328C into Harris Reservoir.
Downstream Limit of Diversion Reach No. 1	
Diversion Point 1	Water will be diverted from Harris Reservoir at Diversion Point No. 1 into Oyster Creek at Discharge Point No. 2. This diversion point is authorized by CA 12-5328.
Discharge Point 2	Water diverted from Harris Reservoir will be discharged into Oyster Creek at Discharge Point No. 2, and then travel down the bed and banks of Oyster Creek to Diversion Point No. 2.
Diversion Point 2	Water diverted from Harris Reservoir into Oyster Creek will be diverted from the existing on-channel reservoir on Oyster Creek at Diversion Point No. 2 authorized by CA 12-5328 into the Dow canal system.

CARRIAGE LOSSES

From Point	To Point	Distance (miles)	Carriage Loss (%)
Discharge Pt. 1	Diversion Reach 1 (Downstream)	229.4	5.8
Diversion Reach 1 (Downstream)	Diversion Pt. 1	n/a	0
Diversion Pt. 1	Discharge Pt. 2	n/a	0
Discharge Pt. 2	Diversion Pt. 2	26.6	0.73
		Cumulative Loss	**6.49**
Distances determined from National Hydrography Dataset (NHD) river mile lengths.			

METHOD OF DETERMINATION OF CARRIAGE LOSSES

From Point	To Point	Method of Determination of Carriage Loss
Discharge Pt. 1	Diversion Reach 1 (Downstream)	Cumulative loss determined from Brazos WAM channel loss factors between control points 531131 and 532801.
Diversion Reach 1 (Downstream)	Diversion Pt. 1	No losses through diversion into Harris Reservoir.
Diversion Pt. 1	Discharge Pt. 2	No losses through release from Harris Reservoir into Oyster Creek.
Discharge Pt. 2	Diversion Pt. 2	Loss for the reach obtained from application No. 13926 for BASF Corporation
Discharge Pt. 1	Diversion Pt. 2	Cumulative loss determined by multiplying delivery factors for the two reaches. CL = 1 – (1-0.058) x (1-.0073) = 0.0649 (6.49%)

STATEMENT 5

SUPPLEMENTAL ATTACHMENT TO WORSHEET 5.0

Photographs at Requested Diversion Points

This amendment seeks to add a diversion reach and two diversion points already authorized under CA 12-5328. Therefore, the requirement to provide photographs at the requested diversion points under this amendment do not apply.

Assessment of the Adequacy of the Quantity and Quality of Flows Remaining after Proposed Diversion

The quantity and quality of flows remaining in the Brazos River after the proposed diversion will remain unchanged because the flows released from Gibbons Creek Reservoir that will be diverted would not otherwise have occurred in the stream. Contractual deliveries pursuant to this requested amendment are expected to increase instream flows in the bed and banks of the Brazos River and its tributaries between Gibbons Creek Reservoir and the diversion reach as this water was historically consumed at Gibbons Creek Reservoir.

The quantity and quality of flows remaining in Oyster Creek after the proposed diversion will also remain unchanged because diversion of the flows released from Harris Reservoir will remain consistent with historical operation of CA 12-5328 and will not increase authorized water use under that water right.

STATEMENT 6

SUPPLEMENTAL ATTACHMENT TO WORSHEET 6.0

WATER CONSERVATION/DROUGHT CONTINGENCY PLANS

Water will be sold under a water sale contract to Dow Chemical who will utilize this supply to supplement supplies available from Dow's water right (CA 12-5328) and contractual purchases from the Brazos River Authority. Applicant will require Dow to continue to maintain any required water conservation and drought contingency plans.

Dow's current water conservation and drought contingency plans are attached to this application.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 30, 2019

Rachel Barry
Run Plant Engineer
Dow Chemical Company
2301 N. Brazosport Blvd. B309
Freeport, TX 77541

Subject: **2019 Submittal of updated Water Conservation Plan and Water Conservation Implementation Report**

Dear Ms. Barry:

The Texas Commission on Environmental Quality (TCEQ) acknowledges the receipt, on April 4, 2019, of Dow Chemical Company's updated Water Conservation Plan and Water Conservation Implementation Report. The TCEQ has completed its review of the above-referenced documents in accordance with TCEQ rules and the plan meets the minimum requirements as defined in Title 30 Texas Administrative Code (TAC) Chapter 288.

If the water conservation plan is revised and adopted in between five-year submittal deadlines, the updated plan must be submitted to the TCEQ within 90 days of adoption. The revised water conservation plan must also include a water conservation implementation report.

Under Title 30 TAC Chapter 288, the next five-year deadline to submit updated water conservation plans, updated drought contingency plans and/or water conservation implementation reports is May 1, 2024.

If you have any questions concerning the five-year submittal process, please contact Jennifer Allis at 512-239-0027 or at jennifer.allis@tceq.texas.gov.

Sincerely,

Jason Godeaux, Team Leader
Resource Protection Team
Water Rights Permitting and Availability Section

7018 0040 0000 0573 9703

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Resource Protection Team—MC 160
P.O. Box 13087
Austin, Texas 78711-3087

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Dow Chemical Co.
Attention: B309 –Billie Brannan
2301 N. Brazosport Blvd
Freeport, Texas 77541

Subject: 5/10 Year- Plan Submittal 2019

B309-Billie Br

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
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Resource Protection Team—MC 160
P.O. Box 13087
Austin, Texas 78711-3087

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PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

The Dow Chemical Company
2301 N. Brazosport Blvd.
Freeport, Texas 77541
USA

April 01, 2019

Certified Mail No: 7018 0040 0000 0573 9703

Texas Commission on Environmental Quality
Resource Protection Team—MC 160
P.O. Box 13087
Austin, Texas 78711-3087
Email: wcp@tceq.texas.gov

Subject: Five Year Plan Submittal

To Whom It May Concern:

The Dow Chemical Company (Hereinafter "Dow"), Texas Operations, Freeport Site is submitting the updated 5/10 Year Water Conservation Plan (WCP) as required by Texas Water Code Chapter 11 and Title 30 Texas Administrative Code Chapter 288.

If you should have any questions in regards to the update plan please contact me directly at 979-238-1489 or [redacted]

Sincerely,

Rachel Barry

Rachel Barry
The Dow Chemical Company
Run Plant Engineer

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Water Availability Division - MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4691, FAX (512) 239-2214

WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

1. **Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
2. **Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years. The most current five-year submittal deadline is **May 1st, 2019.** See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: The Dow Chemical Company
2. Water Right Permit or Certificate Nos. 5328 Freshwater; 5334 Seawater
3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

_____Municipal Water Use by Public Water Supplier

_____Wholesale Public Water Supplier

X_____Industrial Use

_____Mining Use

_____Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

_____Individually-Operated Irrigation System

_____Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes x No_____

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.

   - Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC 288. http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
   - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserve.html

*Call 512-239-4691 or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.
   Yes X No_____
   If the targets were not met, please provide an explanation.

7. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
   Yes X No_____

   If yes, please identify where in the water conservation plan the updated targets are located (page, section).

   Page 4, Section B Number 1: Dow's conservation goal is to reduce ratio of lbs of product with the 5 year goal 5% reduction and the 10 year goal 10% reduction.

8. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

The plan has no new revisions or updates to the current plan.

9. Form Completed by (Point of Contact): Rachel Barry
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Run Plant Engineer

Contact Address: 2301 N. Brazosport Blvd. B309 Freeport, Texas 77541

Contact Phone Number: 979-238-1489 Contact Email Address: [redacted]

Signature: Rachel Barry Date: APRIL 1, 2019

The Dow Chemical Company
2301 N. Brazosport Blvd.
Freeport, Texas 77541
USA

April 01, 2019

Certified Mail No: 7018 0040 0000 0573 9680

Texas Commission on Environmental Quality
Resource Protection Team—MC 160
P.O. Box 13087
Austin, Texas 78711-3087

To Whom It May Concern:

The Dow Chemical Company (Hereinafter "Dow"), Texas Operations, Freeport Site is submitting the annual Water Conservation Plan as required by 30 TAC 288.

If you should have any questions in regards to the report please contact me directly at 979-238-1489 or [redacted]

Sincerely,

Rachel Barry

Rachel Barry
The Dow Chemical Company
Run Plant Engineer

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4691, FAX (512) 239-2214

Industrial Water Conservation Plan

This form is provided to assist entities in developing a water conservation plan for industrial water use. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Additional resources such as best management practices (BMPs) are available on the Texas Water Development Board's website http://www.twdb.texas.gov/conservation/BMPs/index.asp. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name:	THE DOW CHEMICAL COMPANY—TEXAS OPERATIONS
Address:	2301 N. BRAZOSPORT BLVD -B3501
Telephone Number:	(979)238-1489 Fax: ( )
Form Completed By:	RACHEL BARRY [redacted]
Title:	RUN PLANT ENGINEER
Signature:	Rachel Barry Date: 04/01/2019

A water conservation plan for industrial use must include the following requirements (as detailed in 30 TAC Section 288.3). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

I. BACKGROUND DATA

A. Water Use

1. Annual diversion appropriated or requested (in acre-feet):

   109,824 ACRE-FEET

2. Maximum diversion rate (cfs):

   423 CFS

B. Water Sources

1. Please indicate the maximum or average annual amounts of water currently used and anticipated to be used (in acre-feet) for industrial purposes:

Source	*Water Right No.(s)*	*Current Use*	*Anticipated Use*
Surface Water	*(end of report)	106,824	131,270
Groundwater	*	348	450
Purchased	*	9,204	24,189
Total		116,376	155,999

2. How was the surface water data and/or groundwater data provided in B(1) obtained?

   Master meter ; Customer meter ; Estimated ; Other: X—PUMP CURVE & METERS

3. Was purchased water raw or treated?

   If both, % raw 91; % treated 9; and Supplier(s) Brazosport Water Authority and Brazos River Authority

C. Industrial Information

Major product(s) or service(s) produced by applicant: CHLORINE, CAUSTIC, EPOXIES, POLYETHYLENE

1. North American Industry Classification System (NAICS):

   2812, 2819, 2821, 2865, 2911, 2879, 1479

II. WATER USE AND CONSERVATION PRACTICES

A. Water Use in Industrial Processes

Production Use	*% Groundwater*	*% Surface Water*	*% Saline Water*	*% Treated Water*	*Water Use (in acre-ft)*
Cooling, condensing, & refrigeration	0	6	94	0	674,721
Processing, washing, transport	0	100	0	0	3,205
Boiler feed	0	100	0	0	13,297
Incorporated into product	0	100	0	0	13,350
Other	0	100	0	0	36,242

Facility Use	% Groundwater	% Surface Water	% Saline Water	% Treated Water	Water Use (in acre-ft)
Cooling tower(s)	0	0	0	0	0
Pond(s)	0	0	0	0	0
Once through	0	0	0	0	0
Sanitary & drinking water	29	0	0	71	1,204
Irrigation & dust control	0	0	0	0	0

1. Was fresh water recirculated at this facility? ☒ Yes ☐ No

2. Provide a detailed description of how the water will be utilized in the industrial process.

Dow Plant A and Plant B receives River Water from the canal system and clarifies it using gravity settlers. Water is then distributed throughout the plant site via a network of piping systems to various points of use. These flows are measured at the intake points. This water is used for process cooling, fire protection and incorporated into products.

The Sea Water System has three sea water intake points. Plant A site pumps water from the Freeport Harbor Channel and diverts it into a canal where it is used for cooling water purposes. Flow is measured at the site via pump curves and documented run times. The second intake gate structure (Dow Ethyl Gates) located on the Dow Barge Canal gravity flows to a Powerhouse for using in cooling. The third sea water intake is a pump station at the end of the Dow Barge Canal in Plant B. Water from the canal is diverted via pumps and flows through a canal system in Plant B where various users receive the sea water and use it for cooling purposes.

3. Estimate the quantity of water consumed in production processes and is therefore unavailable for reuse, discharge, or other means of disposal.

52,238 ACRE-FEET

4. Monthly water consumption for previous year (in acre-feet).

Month	Diversion Amount	% of Water Returned (If Any)	Monthly Consumption
January	55,979	93	3,928

February	54,442	93	3,655
March	52,487	94	3,368
April	60,256	93	4,387
May	66,978	91	5,756
June	75,047	93	5,435
July	79,755	93	5,942
August	80,630	92	6,155
September	64,853	93	4,422
October	52,971	94	3,072
November	45,688	93	3,223
December	53,729	93	3,723
Totals	740,816	93	53,064

5. Projected monthly water consumption for next year (in acre-feet).

Month	*Diversion Amount*	*% of Water Returned (If Any)*	*Monthly Consumption*
January	55,979	93	3,928
February	54,442	93	3,655
March	52,487	94	3,368
April	60,256	93	4,387
May	66,978	91	5,756
June	75,047	93	5,435
July	79,755	93	5,942
August	80,630	92	6,155
September	64,853	93	4,422
October	52,971	94	3,072
November	45,688	93	3,223
December	53,729	93	3,723
Totals	740,816	93	53,064

B. Specific and Quantified Conservation Goal

Water conservation goals for the industrial sector are generally established either for (1) the amount of water recycled, (2) the amount of water reused, or (3) the amount of water not lost or consumed, and therefore is available for return flow.

1. Water conservation goal (water use efficiency measure)

   Type of goal(s):

   % reused water

   % of water not consumed and therefore returned

   X Other (specify): Dow's conservation goal is to reduce ratio of lbs of water by lbs of product with the 5 year goal 5% reduction and the 10 year goal 10%.

2. Provide specific, quantified 5-year and 10-year targets for water savings and the basis for development of such goals for this water use/facility.

Dow's efforts to bring employees, community and government stakeholders to collaborate on more holistic approaches to water management were recognized with a 2013 Texas Excellence Award by the TCEQ. Dow is receiving the award for a series of water conservation/improved utilization projects implemented in 2012 that are expected to save up to 9,900 gallons per minute of water. This reduction will represent a 10% reduction in water at the site (Dow's 10 year goal in the current conservation plan).

Most of the projects listed have sustainable benefit to the environment by the permanent reduction in freshwater consumed. Permanent piping was installed to make the project sustainable even if only used during a drought. The implantation of these projects serves as a model for our site. To ensure the ability to capture and store more water when river flows are high, additional pumping capacity was installed. New plants are being designed and built integrating water minimization and recycle practices.

Quantified 5-year and 10-year targets for water savings:

a. 5-year goal: To reduce ratio of lbs of water by lbs of product with the 5 year goal 5% reduction

10-year goal: To reduce ratio of lbs of water by lbs of product with the 10 year goal 10% reduction

3. Describe the practice(s) and/or device(s) within an accuracy of plus or minus 5% used to measure and account for the amount of water diverted from the supply source.

Based on the Brazos River Water Master Program requirements, Dow has installed and maintains a flow meter that is accurate +/-5%. The TCEQ Brazos Water Master also verifies the accuracy of the water meter on an annual basis.

4. Provide a description of the leak-detection and repair, and water-loss accounting measures used.

Improving the maintenance of many of our older river water lines has resulted in the reduction of water loss. Ongoing efforts are being made to replace lines that are failing and at end of life.

5. Describe the application of state-of-the-art equipment and/or process modifications used to improve water use efficiency.

An additional 3,500 GPM was saved by eliminating slab washing and water landscaping.

Chlorine Once -Through Cooling Tower Recycle—this project recycles the once through cooling water for the rectifiers at one of the chlorine plants, as well as the once through cooling water for an air compressor station.

Elimination of One Pass Fire Water Monitor Cooling at Power 6—Piping was installed to allow for the use of seawater for cooling saving 200 GPM of continuous freshwater use and 200-600 GPM during startups and shutdowns.

Demin Water Plant Resin Change—this project significantly improves the operation of a resin bed, as well as modifications to a reservoir to maintain the gains in efficiency.

Power 3 Supplemental Cooling Automation—this project scope was initially to change from water cooling to air cooling for a section of a power plant that required intermittent cooling. However, there was insufficient space to install the required fin-fan exchangers. So alternate plan was developed to slightly modify existing equipment and implement process control to allow for the automation of the cooling water valve.

Cooling Tower Chemistry—Dow worked with their water treatment chemical provider to modify the water treatment chemistry on 25 cooling towers to reduce makeup water by 400 GPM.

Soft Water Recycle—this project installed piping, valves, flow meters, and other instrument to recycle soft water from a propylene oxide plant to the site river water header when only two trains are running saving 3,000 GPM.

6. Describe any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the stated goal or goals of the water conservation plan:

Success is measured in sustainable reductions of water use

Project Title:	Water Re-Use/ Recycle (Gallons)
City of Lake Jackson Waster Water Re-Use	1,213,650,000
PO Soft Water Recycle	148,755
Supplement Cooling Recycle	946,080,000
Total Gallons:	3,106,949,740

	Water Reduction (Gallons):
Dorr Pond Water Reduction	69,120,000
Demin Water Plant Resin Change	276,480,000

Elimination of One Pass Water Monitor Cooling	209,880,000	
Power 3 Supplemental Cooling Automation	177,652,800	
Total Gallons:		670,924,800

Other information from questions above:

From Question B(1):

Fresh Water Right Permit Numbers—Adjudicated Right #5328: 1145, 1345, 1630, 1631, 1964, 1964B

Sea Water Right Permit Numbers—Adjudicated Right #5334: 11-5334, 1361, 1631A, 1261B

III. Water Conservation Plans submitted with a Water Right Application for New or Additional State Water

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.

TXO Drought Contingency Plan

History

Fresh water is essential to the operation of the Freeport site. Recent Brazos River flow history indicates there are windows of time when, for all practical purposes, all of the flow in the river that is passing the Rosharon gage up stream of the Harris Reservoir intake is pumped into the reservoir.

Any number of circumstances could result in conditions that would not allow Dow to continue to fill Harris Reservoir, including:

1) more severe drought conditions,

2) permitted senior rights pumping for agricultural purposes,

3) loss of a Harris intake pump due to mechanical failure and

4) various forms of junior rights holder infringement

Any of the above conditions could start a time clock that could be as short as 20 days to reach a condition where no surface water is available for the local Brazosport Area community and no water is available for operation of the Dow facilities. The management of these situations is important to the continued operations of Texas Operations, the other industrial users of the canal, and the community drinking water supply.

Given the short timeline to an eminently critical situation with very large financial losses, trigger points and action plans are required to:

1) Maximize efficiency of legal processes to address upstream rights infringement

2) Efficiently drive water conservation and water use curtailment

3) Maximize the utility of the Dow Chemical Freeport Sites limited reservoir storage

4) Minimize the risk of loss of water service in the local Brazosport Area communities

5) Minimize the risk of financial losses

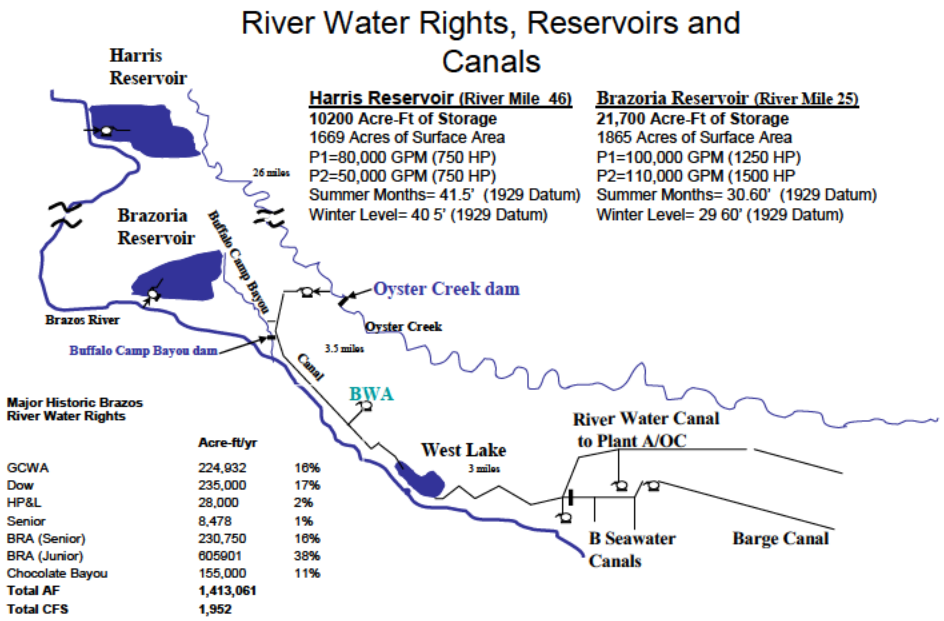
What Defines a Drought

A drought to the Freeport Site is defined by the amount and flow of water in the Brazos River near Harris and Brazoria Reservoir and upstream storage in lakes. Local rainfall conditions do not always indicate drought conditions used to activate this plan.

Systems Descriptions

- Harris Reservoir – Located NW of Angleton, 46 River Miles from the Gulf, was put into service in 1947. Average depth is 5.5 feet.
- Brazoria Reservoir – Located 24 River Miles from the Gulf, was put into service in 1954. Average depth is 9.5 feet.
- Fresh Water Canal – A 15.5-mile (40' Ditch) man made canal which parallels the Brazos River from Oyster Creek to Plant B, goes through the BASF site and parallels the Barge Canal to Plant A.
- Under non-drought conditions, Dow & outside customers are supplied Raw River Water from the Brazos River via the Brazoria Reservoir. A 100,000 and 110,000 gpm pump lift the water from the Brazos River into the Brazoria Reservoir. Water is siphoned from the reservoir into Buffalo Camp Bayou. There is a dam and diversion structure in Buffalo Camp Bayou where the water is gravity diverted to the 15.5-mile man made canal going to the plant sites.
- Under drought conditions when the salt wedge has migrated upriver past the Brazoria Reservoir intake, water will be supplied from Harris Reservoir. An 80,000 and 50,000-gpm pump lift water from the Brazos River into the Harris Reservoir. The water is discharged by siphons into Oyster Creek and flows down the creek to the Lake Jackson Pump Station. There are 4 pumps at the Lake Jackson Pump Station, giving the station a maximum capacity of 150,000 gpm. Water is lifted by these pumps from Oyster Creek into the 15.5-mile man made canal going to the plant sites.

Reservoirs and Canals



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Water Contacts:

River Water Contacts:	[redacted]
Brazosport River Authority	Cathy Dominguez [redacted]
Gulf Coast Water Authority	Brenda Johnson [redacted]
TCEQ Water Master	Molly Mohler (254)761-3006 molly.mohler@tceq.texas.gov

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Responsibilities

Env Ops Water Distribution and Reservoirs:

1. In April of each year, issue an analysis of the "Drought" potential and level of preparedness for that year to the Env Ops, EOPC, and Site Management. The analysis should include the following:
   - Rainfall and Reservoir Storage Estimates from the Brazos River Authority.
   - Dow Reservoir Levels and Condition
   - Location of the "Salt Wedge"
   - Mechanical Integrity of Dow Reservoir pumps, motors, etc.
2. Maintain the Daily River Water Report – Water pumped from the Brazos River and siphoned from the reservoirs will be recorded on the Daily River Water Report. This report is maintained year-round.
3. Tracking Salt Wedge Movement – During periods of drought, the location of the salt wedge in the Brazos River will be located and recorded on the Daily River Water Report. This location will be communicated via e-mail to the EOPC, SEMs and others when the salt wedge is migrating upriver and past the Brazoria Reservoir intake (mile marker 22)
4. Minimize water pumped during droughts – Water flow to the plant and outside customers will be controlled in such a manner to minimize wasting.
5. Communicate with outside customers through Contract Managers, Site Integration & Optimization.
6. Contact the Brazos River Authority to assess the availability of "Interruptible Water" that can be released for use by Dow.
7. Track and publish water use after conservation request is made to the Site.

The Water distribution Team will ensure purchased water is secured based on step 6 above:

Step	Action
1	By August of each year, Env Ops, along with the Env Tech Center, will contact the Brazos River Authority to assess the availability of "Interruptible Water" that can be released for use by Dow. This water may be secured by Env Ops for use by Dow if needed.
2	When Interruptible water is needed, Env Ops will contact BRA's Cathy Dominguez and arrange to purchase.
3	The order amount should be the difference between 80,000 AF and other secured contracts.
4	BRA will require application fee and 10% of funds before water is released. https://brazos.org/Portals/0/Documents/Forms/WR-1-Form-2022.docx
5	All purchases and credits, if used, are scanned and put in the folder: \\Txnt45\ENV_OPER\RESERVOIRS\Unapproved_Management System_Contracts & Agreements\Brazos River Authority
6	To minimize the amount of water that is wasted and expense to Dow, delivery timing should be coordinated with pump cycling at the Harris Intake pumps

8. Track and publish water use after conservation request is made to the Site.

The following link is to a document that explains the philosophy and method to charge third parties for additional river water purchased from the Brazos River Authority (BRA) during drought conditions.

\\Txnt45\ENV_OPER\RESERVOIRS\Approved\Facilities Operations\Operating Facilities\Water Supply\2020 Drought\Contract Water Cost recovery.xlsx

EOPC:

1. Issue drought condition status to Texas Operations during drought conditions via Management Bulletin.
2. Issue and enforce site drought reduction measures.

Site Operations Center:

1. With a drought being gradual over time, Env Ops and Site Integration should work with each business on site to determine a load-shed plan–if needed. PPC and RMC will execute the plan as appropriate.

Continued on next page

Trigger Levels

The following links are followed to determine the levels in the river and information about water supply:

BRA Water Info The Brazos River Authority River and Reservoir Levels

BRA Drought Info The Brazos River Authority > About Us > Water Supply > Drought

Gauge Stations

The following list shows the locations of the gauge stations.

Station	Location River Mile	River Miles To Harris
Hempstead	193.8	147.7
Richmond	92.0	45.9
Rosharon	56.7	10.6

River Flow Trigger Levels at Gauge Stations or Reservoir Conditions

Trigger levels are identified as follows:

Level	Explanation
1. **Normal Level** – Wet Conditions	Under this condition, sufficient water exists to meet all diversion needs. ▪ Hempstead Gauge Stage greater than or equal to 2,200 cfs ▪ Richmond Gauge Stage greater than or equal to 1,700 cfs ▪ Rosharon Gauge Station greater than or equal to 1,700 cfs.
2. Caution Level – The salt wedge in the river has passed the Brazoria Reservoir intake at river mile 22. Brazoria Intake pumps are off. Water supply to the Site is coming from Harris Reservoir.	Under this condition, sufficient water exists, supplied from Harris reservoir, to meet normal demands of the Freeport site and industrial customers. ▪ Hempstead Gauge Stage less than or equal to 1700 cfs ▪ Richmond Gauge Stage less than or equal to 1500 cfs ▪ Rosharon Gauge Station less than or equal to 1200 cfs.

3. Watch Level – Water flow past the Rosharon gauge has dropped to 730 cfs.	Under this condition, sufficient water exists, supplied from Harris reservoir, to meet normal demands of the Freeport site and industrial customers. ▪ Hempstead Gauge Stage less than or equal to 1500 cfs ▪ Richmond Gauge Stage less than or equal to 1200 cfs ▪ Rosharon Gauge Station less than or equal to 730 cfs.
4. Warning Level – Water flow past the Rosharon gauge has dropped to 330 cfs. 330 = full water right	Under this condition, sufficient water exists, supplied from Harris reservoir, to meet normal demands of the Freeport site and industrial customers. ▪ Hempstead Gauge Stage less than or equal to 1100 cfs ▪ Richmond Gauge Stage less than or equal to 780 cfs ▪ Rosharon Gauge Station less than or equal to 330 cfs.
5. Severe Level – Water flow past the Rosharon gauge has dropped to 200 cfs. Intake pumps at Harris are cycled on and off over several days to manage the salt wedge proximity to the intake.	Under this condition, sufficient water may not exist, supplied from Harris reservoir, to meet normal demands of the Freeport site and industrial customers. ▪ Rosharon Gauge Station less than or equal to 200 cfs.
6. Emergency Level – The salt wedge in the river has passed the Harris Reservoir intake at river mile 44. Intake pumps are off. Water supply to the Site is coming from stored water in Harris and Brazoria Reservoir.	At this level, it is known that there is not enough water to meet companies' needs and all participants are being supplied from stored water.

Contingency Plan

Early Drought Planning/Warning

In April of each year, the Env Ops Water Distribution and Reservoirs representative will issue an analysis of the "Drought" potential and level of preparedness for that year, to include the following:

- Rainfall and Reservoir Storage Estimates on the Brazos River
- Dow Reservoir Levels and Condition
- Location of the "Salt Wedge"
- Mechanical Integrity and Misc.

This information will be communicated to the core EOPC and SEM's. Env Ops, and Business and Site Management:

In the event that a drought year seems probable, implement the following water conservation measures:	
Step	**Action**
1	Env Ops Water Distribution will initiate a contact, through Cathy Green, Site Integration & Optimization, to all non-Dow users of Raw Water and Clarified Water to inform them that the potential for a Drought exists and to conserve water wherever possible.
2	Env Ops will contact the Brazos River Authority to assess the availability of "Interruptible Water" that can be released for use by Dow. This water may be secured by Env Ops for use by Dow if needed.
3	Env Ops Water Distribution and Reservoirs will maintain Harris and Brazoria Reservoirs at full level. Any conditions, which impact the ability to do so, will be communicated to the EOPC and SEMs.

Normal Level – Wet Conditions

Under this condition, sufficient water exists to meet all diversion needs.

Rosharon Gauge Station greater than or equal to 1,700 cfs.

Step	Action
1	The Reservoir Tech and Production Engineer will monitor the 15-to-20-day graph of river flow at the Rosharon, Richmond and Hempstead gauges. The frequency will depend on the river flow and conditions, increasing as the flow trends down.
2	The Reservoir Tech and Production Engineer will monitor the Palmer Drought Index and Brazos River Website for drought information.

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Caution Level

Under this condition, sufficient water exists in the Brazos to meet normal demands of Dow and other companies on the Brazos, however, due to low rainfall in the watershed, the salt wedge may migrate upriver and pass the Brazoria intake.

Under these conditions, the Brazoria pumps will be shut down and water will be supplied from Harris Reservoir. The salt wedge is not expected to move past the Harris intake.

If rainfall is not expected in the near future to move the salt wedge down river, the following actions will be implemented.

Rosharon Gauge Station less than or equal to 1,700 cfs.

Step	Action
1	Env Ops will issue communications to the plants to minimize the use of river water where there is little or no economic impact, including: ▪ Minimize washing of slabs. ▪ Minimize flushing of hydrants. ▪ Minimize watering of shrubs. Maximize use of seawater for cooling
2	Env Ops may issue updates on the status of conservation measures via email. This will depend on the existing potential for rainfall in the basin that may move the salt wedge down river.
3	Env Ops Water Distribution will contact, through Cathy Green, Site Integration & Optimization, all non-Dow users of Raw Water and Clarified Water to inform them of the need to conserve water wherever possible and record their response.
4	Env Ops Water Distribution will monitor drought conditions and predictions in Texas and report to the Site via an update meeting. The Reservoir Tech and Production Engineer will monitor the 15-to-20-day graph of river flow at the Rosharon, Richmond and Hempstead gauges. The frequency will depend on the river flow and conditions, increasing as the flow trends down.
5	Based on predicted river flows, Env Ops may schedule a weekly or bi-weekly 30-minute drought condition update meeting with the following people: Site Leader: Fernando Signorini Site Responsible Care Leader: Dhaval Buch Gulf Coast OPS Public Affairs: Gabriella Cone Regulatory Affairs: Will Nipper Government Affairs: Daniel Womack Env Ops Director: Derek Rester Water Distribution and Reservoirs Operation Leader: Jason Garrard Tech Center: Tim Finley

Watch Level

At this level, sufficient water still exists in the Brazos to meet normal demands of Dow and other companies. The salt wedge has migrated upriver passed the Brazoria intake. No rainfall is expected in the near future to move the salt wedge down river. The Brazoria pumps are shut down and water is being supplied from Harris Reservoir.

The salt wedge is not expected to move past the Harris intake.

Rosharon Gauge Station less than or equal to 730 cfs.

Step	Action
1	**Steps under Caution Level will be implemented.**
2	Env Ops RPE to work with site RPE to develop Appropriate Once-through Cooling Water reduction to be implemented. Reference Six Sigma Project; \\Txnt45\ENV_OPER\WD\Approved\Project Records\Once Through Cooling MAIC Project
3	Lower Brazos Basin users will meet weekly and discuss water flows and determine release coordinating with BRA and TCEQ Water Master.
4	Env Ops, along with the Env Tech Center, will contact the Brazos River Authority to re-assess the availability of "Interruptible Water" that can be released for use by Dow. This water may be secured by Env Ops for use by Dow if needed.
5	Env Ops may issue updates on the status of conservation measures via email.
6	Env Ops RPE to work with SPO RPE and develop list of active water leaks to repair. The group will also request plants repair and ISBL leaks.
7	Env Ops (Jason Garrard) will contact the Brazosport Water Authority to discuss water purchasing strategies. The BWA may elect to have Dow purchase water on their behalf and bill them.

Warning Level

At this level, sufficient water still exists in the Brazos to meet normal demands of Dow and other companies. The salt wedge has migrated upriver passed the Brazoria intake. The Brazoria pumps are shut down and water is being supplied from Harris Reservoir.

The salt wedge is not expected to move past the Harris intake.

No rainfall is expected in the near future to move the salt wedge down river.

Rosharon Gauge Station less than or equal to 330 cfs.

Step	Action
1	**Steps under Caution and Watch Level will be implemented.**
2	Env Ops RPE will continue to track and record water conservation efforts with Once-Through Cooling and Leak repairs.
3	Env Ops Water Distribution will switch to ground water wells for potable water if the river flow is continuing to trend down.
4	Lower Brazos Basin users will meet weekly and discuss water flows and determine release coordinating with BRA and TCEQ Water Master.
5	Env Ops, along with the Env Tech Center, will contact the Brazos River Authority to re-assess the availability of "Interruptible Water" that can be released for use by Dow. This water may be secured by Env Ops for use by Dow if needed.
6	Env Ops may issue updates on the status of conservation measures via email.
7	Env Ops and Site integration will plan for a load shed based on current plant operating conditions.
8	Env Ops and the Env Tech Center will request that BRA activate the Lower Basin Management Plan to track water use.
9	Env Ops will contact the GCWA and NRG to determine water use and water purchasing strategies.
10	Env Ops will contact the Brazosport Water Authority to finalize water purchasing strategies. The Brazosport Water Authority may elect to have Dow purchase water on their behalf and bill them.
11	Env Ops will contact the Houston Field Office of the USGS to check the calibration of the Rosharon gauge

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Severe Level

At this level, it is known that not enough water exists in the Brazos to meet normal demands of Dow and other companies and that some companies, including Dow, may need to release water stored in upstream lakes and reservoirs.

No rainfall is expected in the near future to move the salt wedge down river. The salt wedge has migrated upriver passed the Brazoria intake. The Brazoria pumps are shut down and water is being supplied from Harris Reservoir.

The salt wedge is not expected to move past the Harris intake. However, the intake pumps at Harris may need to be cycled on and off over several days to manage the salt wedge proximity to the intake.

Rosharon Gauge Station less than or equal to 200 cfs.

Step	Action
1	Steps under Caution, Watch and Warning Levels will be implemented.
2	Env Ops Water Distribution will switch to ground water wells for potable water.
3	Env Ops will issue updates on the status of drought conditions and conservation measures via management bulletins.
4	Env Ops will update the Site through the ECC.
5	Env Ops, along with the Env Tech Center, will contact the Brazos River Authority to secure “Interruptible Water” for use by Dow.
6	The Reservoir Tech and Production Engineer will implement the tracking sheet for water purchases.
7	Lower Brazos Basin users will meet weekly and discuss water flows and determine release coordinating with BRA and TCEQ Water Master.
8	Env Ops will coordinate discussions with TCEQ Water Master including Tech Center, Regulatory Affairs, and Site Integration.
9	Env Ops and Site Integration will evaluate if any load shed should be implemented based on current plant operating conditions and purchased water availability.
10	Site Integration & Optimization (Cathy Green), will contact all non-Dow users of Raw Water and Clarified Water to inform them that Dow is purchasing water and special billing procedures will be implemented.

Emergency Level

At this level, it is known that there is not enough water to meet Dow and other companies' needs. No rainfall is expected in the near future to move the salt wedge down river.

The salt wedge has moved passed the Harris intake. No water can be pumped from the Brazos under these conditions and all water to Dow, outside customers and the Brazosport Water Authority will be supplied from water already stored in Harris and Brazoria Reservoirs.

There is no "Interruptible" water available for purchase.

Step	Action
1	Env Ops will contact the Brazos River Authority for release of Stored Water.
2	Env Ops and Site integration will implement the load shed plan based on current plant operating conditions and remaining reservoir volume.
3	Site Integration & Optimization (DSB), will contact all non-Dow users of Raw Water and Clarified Water to request river water use curtailment.
4	Env Ops will contact the Brazos River Authority for release of Stored Water.

Lower Basin User Groups

The Lower Basin Users Group is made up of Dow, Gulf Coast Water Authority, TCEQ Water Master and NRG. These are the three largest Brazos River water consumers in the Lower Basin and the jurisdictional body. During times of drought, the group provides usage data to TCEQ Water Master.

The objectives of the group are to:

- Enhance communication between major water users
- Facilitate exchange of information between water users
- Facilitate voluntary compliance with water right permits

Protect dedicated reservoir releases.

Senior Rights Call

Any questions or concerns with water rights should be directed towards the TCEQ Water Master Group.

Review history

The following information documents at least the last 3 reviews to this document..

Date	Reviewed By	Comments
5/16/23	J. Garrard	Updated pump flows

Revision history

The following information documents at least the last 3 changes to this document, with all the changes listed for the last 6 months.

Date	Revised By	Changes

May 2022	J. Garrard	Document created. MOC Number: - Reserv32022050001
5/16/23	J. Garrard	Updated pump flows

Appendix 1

Talking Points Developed by Public Affairs

FOR DOW REFERENCE
IN RESPONDING TO EXTERNAL STAKEHOLDER QUESTIONS

Brazos River Level Issue
External Talking Points
June 24, 2009

- Maintaining sufficient water flow from the Brazos River to Dow's Texas Operations site in Freeport is critical to the company's ability to operate the site. Dow Texas Operations currently uses Brazos River water to run its manufacturing plants, which produce numerous products that are essential to consumer goods, such as cars, computers and agricultural products.

- Recent drought conditions, caused by a lack of Spring rain, have caused the stream flow into the lower Brazos River to reach record low levels, resulting in the threat of an insufficient supply of water from the Brazos River to enable uninterrupted production at the Dow Texas Operations site.

- Dow is closely monitoring the situation and working with the Brazos River Authority and TCEQ, as well as other local entities, to identify potential solutions that would enable uninterrupted operations at the Freeport site, in the event of continued drought conditions through July.

- In addition to pursuing options for supplemental water supply, Dow is taking action to reduce its near-term demand for Brazos River Water. Dow Texas Operations has asked all plants on site to initiate water conservation measures, effective immediately.

- Further water conservation efforts on the part of other consumers may be necessary in order to address the current imbalance between Brazos River water supply and demand from all industrial and residential Brazos River water consumers.

- In addition to using water to produce its own products, Dow also supplies water to industrial neighbors such as BASF and Shintech.

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Appendix 2:

Communications Via Management Bulletins

Examples

Continued

Management Bulletin #3 - Brazos River Water Alert - Update
July 21, 2009
This is an update on our current drought conditions and the site's progress on conserving water.

Drought conditions have not improved, and Environmental Operations is **purchasing river water** from the Brazos River Authority to sustain operations. This is a short-term option to ensure a sufficient amount of fresh water is available to maintain productivity and is viable as long as upstream water remains available. We currently believe that this will be the case through August or Mid-September.

The original Management Bulletin called for a 2,000-5,000-gpm reduction across the site. River water consumption *increased* by about 7,000 gpm and is only now returning to the original level, as illustrated in the graph below.

The salt wedge has moved down the Brazos River as a result of the purchased water and is currently 11 miles from the Harris Reservoir intake. The current plan is to continue purchasing water as long as the current drought conditions persist, and water remains available to purchase.

If drought conditions do not change and purchased water or stored water is no longer available, when the salt wedge reaches the reservoir intake, the site will run strictly on its reservoir capacity, which will last roughly 30-40 days. If this occurs the site will begin reducing production and shutting down plants.

It is critical that each plant pursue all non-value destroying measures to conserve water in every form that is used on site. **ALL WATER SHOULD BE CONSERVED.** This includes raw river water, clarified river water, **potable water** and **condensate**.

The current conservation measures should include but not be limited to:

- Stop washing slabs
- Stop flushing hydrants
- Stop watering shrubs and grass
- Maximize the use of seawater for cooling where this can reduce river water use
- Reduce once through cooling water as much as possible
- Fix any significant river water leaks

Cooling Towers: Water conservation measures that would be detrimental to equipment such as over cycling cooling towers should be avoided at this time. Please contact your water treatment service provider to understand appropriate actions to take to reduce cooling tower blow down.

A **Green Belt project** has been kicked off to eliminate once-through cooling water use where possible. All plants have been requested to provide data to Environmental Operations on once-through water use. An engineering resource has been made available for this project. Please support this effort.

Plans to identify additional water conservation measures are being developed and your support for these efforts will be critical to minimize the financial impact that this drought will have on the site.

Environmental Operations will continue to closely monitor the situation and will send updates while these conditions exist. Contact Jason Garrard, 979-238-3934, or Ja'Nae McGee, 979-238-0656 at Environmental Operations if you have questions.

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Appendix 3:

Communications Via Management Bulletins

Examples

Continued

Management Bulletin #4 - Brazos River Water Update
October 14, 2009

This is an update on our current drought conditions and the release of certain water use restrictions.

Due to the recent rainfall in the lower Brazos River basin, local drought conditions have improved, and the salt wedge has move downriver from the Brazoria Reservoir intake The Freeport Site is no longer purchasing water. Water is currently being supplied to the Site from both Harris and Brazoria Reservoirs.

Parts of the river basin are still in drought and the need to conserve water still exists; however, the following restrictions are being lifted during this period of higher Brazos River flow:

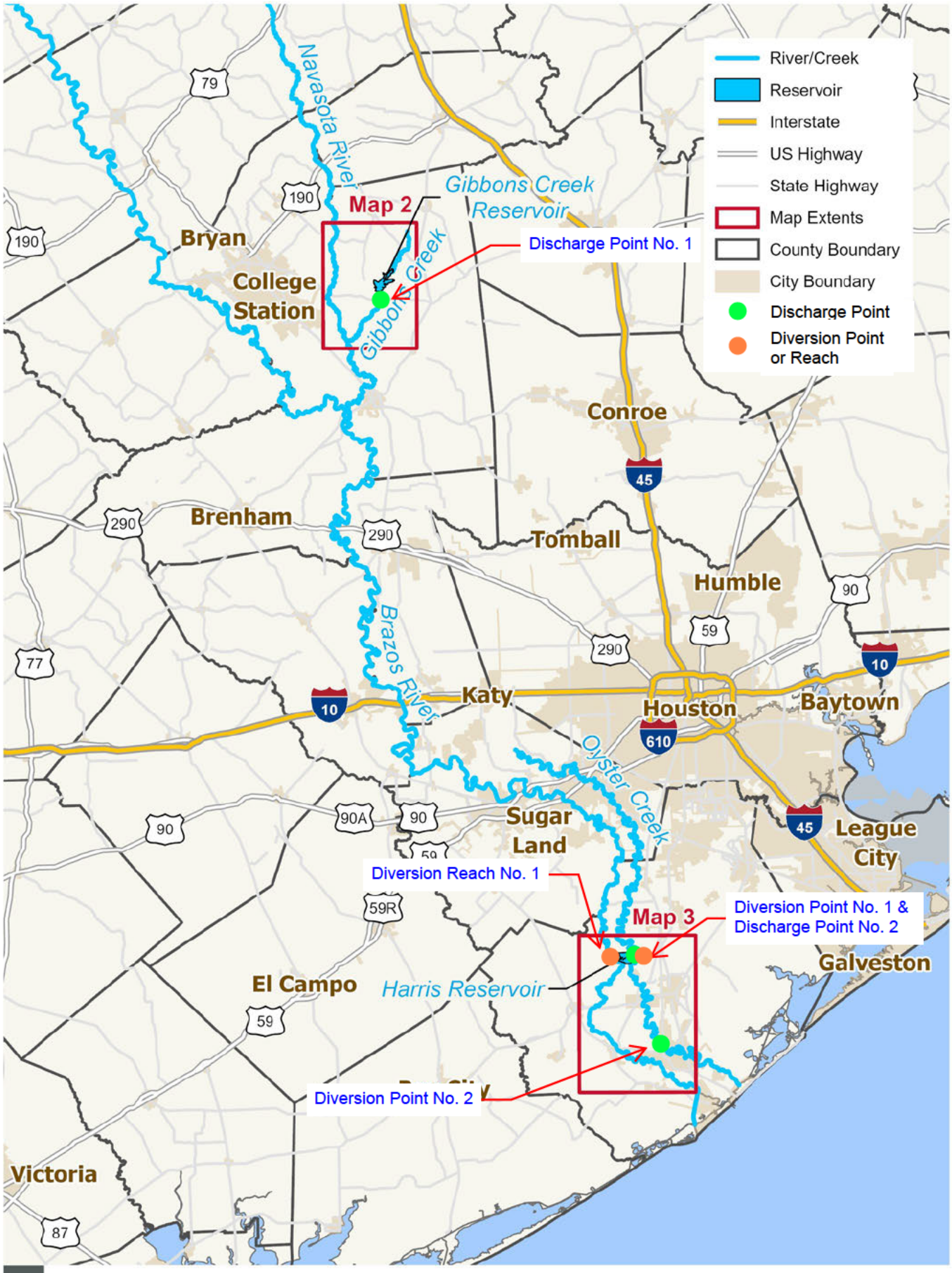
- Fire hydrant flushing
- Deluge system testing

These activities must be coordinated through ES&S.

Note: Deluge systems that have already been inspected and "dry tripped" by Webb Murray this year do not have to be re-inspected and "wet-tripped" until their next annual inspection is due.

Since rainfall in the middle and upper basin has not been sufficient to refill storage lakes and reservoirs, the current river flow will last only as long as rainfall runoff persists in the lower Brazos River basin.

Environmental Operations will continue to closely monitor the situation and will send updates while these conditions exist. Contact Jason Garrard, 979-238-3934, or Ja'Nae McGee, 979-238-0656 at Environmental Operations if you have questions.



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VICINITY MAP
Map 1

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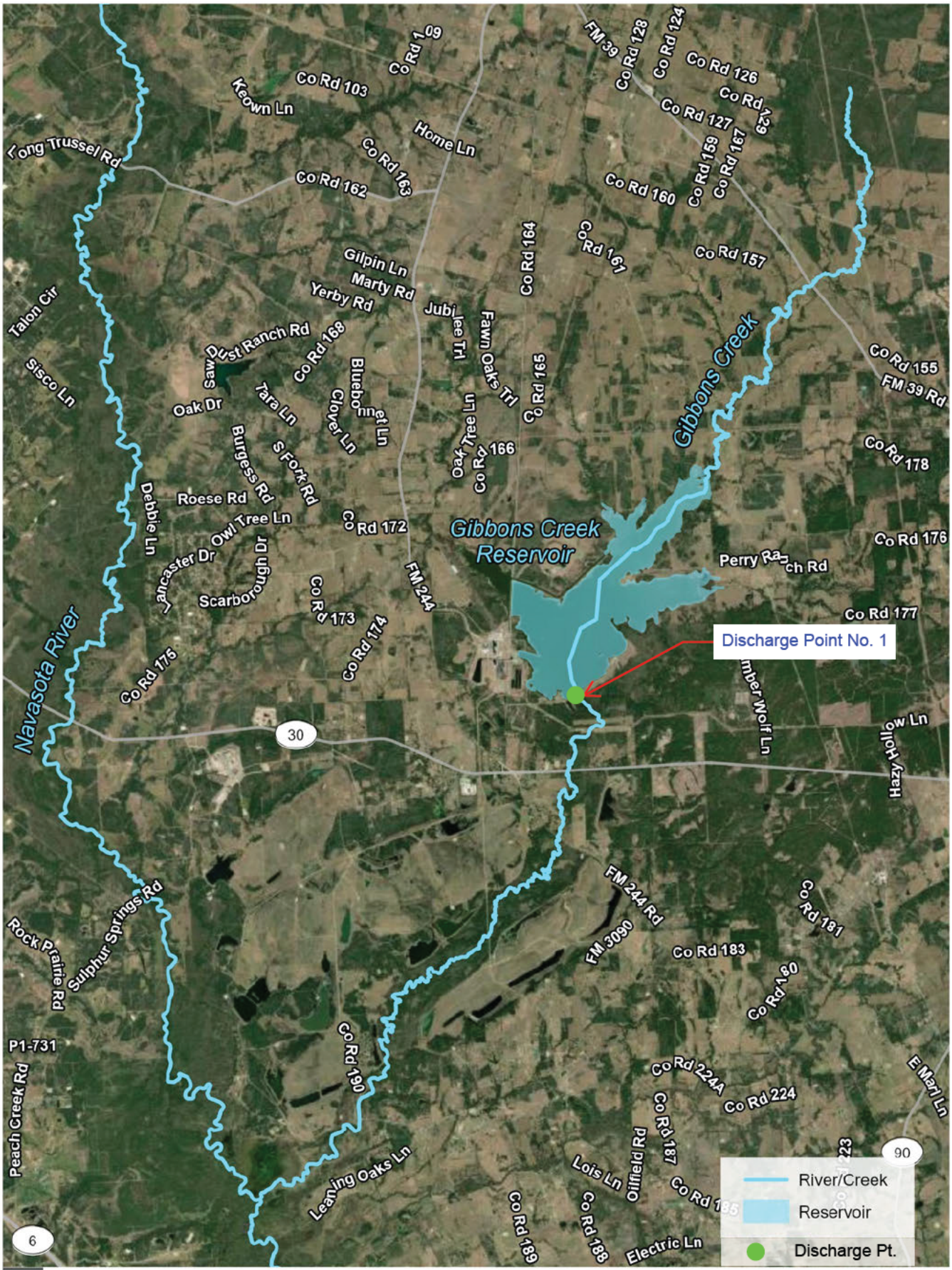
DATE: 8/10/2023

GIBBONS LAKE & LAND WATER SUPPLY



GIBBONS CREEK RESERVOIR & GIBBONS CREEK

Map 2

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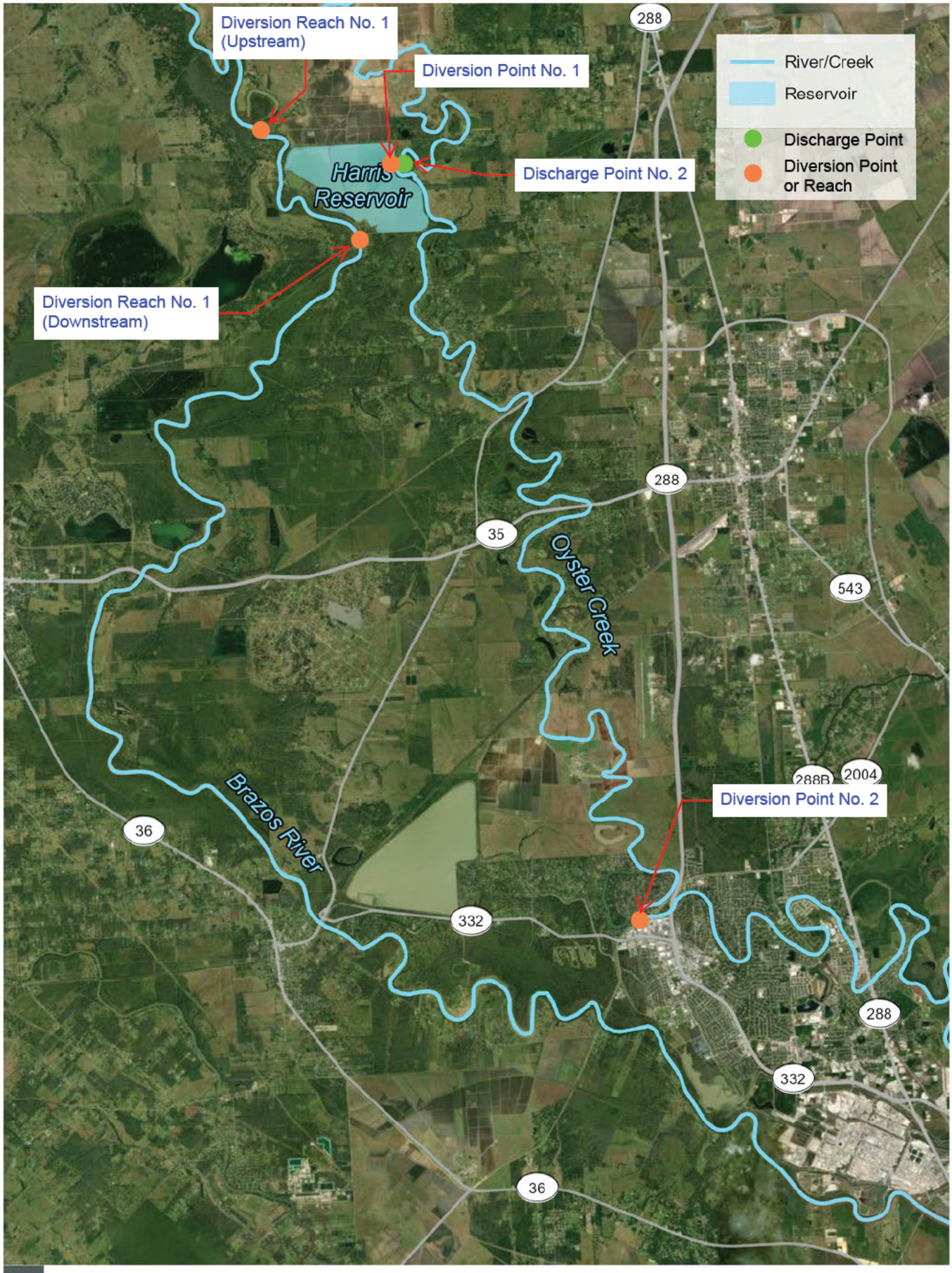
DATE: 8/10/2023



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HARRIS RESERVOIR TO TERMINUS
Map 3

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DATE: 8/10/2023

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