# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



## NOTICE OF AN APPLICATION TO AMEND A WATER USE PERMIT

#### APPLICATION NO. 5827B

The City of Houston seeks to amend Water Use Permit No. 5827 to add 23 diversion reaches for its authorized return flows on Brays, Greens, Hunting, Sims, and White Oak Bayous, from the City's upper-most wastewater treatment plant discharge locations and extending down to Buffalo Bayou in Harris County, San Jacinto River Basin and to add agricultural purposes of use to the water authorized for diversion. More information on the application and how to participate in the permitting process is given below.

**APPLICATION**. City of Houston, 611 Walker Street, Houston, Texas 77002, Applicant, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Water Use Permit No. 5827 pursuant to Texas Water Code (TWC) § 11.122 and TCEQ Rules Title 30 Texas Administrative Code (TAC) §§ 295.1, et seq. Notice is being mailed to the interjacent water rights holders of record in the San Jacinto River Basin pursuant to Title 30 TAC § 295.158(c)(3)(D).

Water Use Permit No. 5827 (Permit), as amended, authorizes the City of Houston (City/Applicant) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The City is also authorized an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

The Permit includes multiple special conditions, including streamflow restrictions and a requirement that diversion of discharged return flows be limited to 50% of the volume discharged on a daily basis from each WWTP.

The time priority of this water right is May 14, 2004.

The Applicant seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on Brays Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Brays Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.705665° N, Longitude 95.567322° W, in ZIP Code 77072 and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W, in ZIP Code 77074;
- 2. Brays Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W, in ZIP Code 77074 and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W, in ZIP Code 77096;
- 3. Brays Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W, in ZIP Code 77096 and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W, in ZIP Code 77012.

The Applicant seeks to amend Water Use Permit No. 5827 to add ten authorized diversion reaches on Greens Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Greens Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.95056° N, Longitude 95.530155° W, in ZIP Code 77064 and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W, in ZIP Code 77067;
- 2. Greens Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.954387° N, Longitude 95.435543° W, in ZIP Code 77067 and a downstream limit located at Latitude 29.94831° N, Longitude 95.401137° W, in ZIP Code 77060;
- 3. Greens Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W, in ZIP Code 77060 and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W, in ZIP Code 77060;
- 4. Greens Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W, in ZIP Code 77060 and a downstream limit located at Latitude 29.939868° N. Longitude 95.34974° W. in ZIP Code 77032:
- 5. Greens Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W, in ZIP Code 77032 and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W, in ZIP Code 77050;
- 6. Greens Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W, in ZIP Code 77050 and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W, in ZIP Code 77050;
- 7. Greens Bayou Diversion Reach 7 has an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W, in ZIP Code 77050 and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W, in ZIP Code 77078;
- 8. Greens Bayou Diversion Reach 8 has an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W, in ZIP Code 77078 and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W, in ZIP Code 77078;
- 9. Greens Bayou Diversion Reach 9 has an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W, in ZIP Code 77078 and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W, in ZIP Code 77013;
- 10. Greens Bayou Diversion Reach 10 has an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W, in ZIP Code 77013 and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W, in ZIP Code 77015.

The Applicant seeks to amend Water Use Permit No. 5827 to add one authorized diversion reach on Hunting Bayou between the WWTP discharge location and Buffalo Bayou in Harris County and described as follows:

Hunting Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.806304° N, Longitude 95.294696° W, in ZIP Code 77028 and a downstream limit located at Latitude 29.737557° N, Longitude 95.212222° W, in ZIP Code 77015.

The Applicant seeks to amend Water Use Permit No. 5827 to add six authorized diversion reaches on Sims Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Sims Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.604109° N, Longitude 95.476793° W, in ZIP Code 77085 and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W, in ZIP Code 77045;
- 2. Sims Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W, in ZIP Code 77045 and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W, in ZIP Code 77048;
- 3. Sims Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W, in ZIP Code 77048 and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W, in ZIP Code 77017;
- 4. Sims Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W, in ZIP Code 77017;
- 5. Sims Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.708652° N. Longitude 95.256605° W. in ZIP Code 77017:
- 6. Sims Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W, in ZIP Code 77017.

The Applicant seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on White Oak Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. White Oak Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W, in ZIP Code 77040 and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W, in ZIP Code 77091;
- 2. White Oak Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W, in ZIP Code 77091 and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W, in ZIP Code 77018;
- 3. White Oak Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W, in ZIP Code 77018 and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W, in ZIP Code 77002.

The amendment application does not seek to change the location of the return flow discharge points, the amount that will be discharged, or the authorized diversion amounts and diversion rates in the Permit.

The 50% limitation on diversion and use of discharged return flows continues to apply to diversion of return flows under this amendment.

The Applicant requests that the maximum diversion amounts and diversion rates in each of the diversion reaches be further limited cumulatively as follows, consistent with the discharge and diversion amounts and rates included in the Permit, as amended:

# 1. Brays Bayou

- A. A maximum of 33,352 acre-feet per year at a combined maximum diversion rate of 48.5 cfs (21,764 gpm) from Brays Bayou Diversion Reach 1;
- B. A maximum of 65,598 acre-feet per year at a combined maximum diversion rate of 95.4 cfs (42,806 gpm) from Brays Bayou Diversion Reach 2;
- C. A maximum of 129,450 acre-feet per year at a combined maximum diversion rate of 188.2 cfs (84,472 gpm) from Brays Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 129,450 acre-feet per year at a maximum combined diversion rate of 188.2 cfs (84,472 gpm) from all diversion points within the three Brays Bayou diversion reaches.

#### 2. Greens Bayou

- A. A maximum of 2,128 acre-feet per year at a combined maximum diversion rate of 3.1 cfs (1,389 gpm) from Greens Bayou Diversion Reach 1;
- B. A maximum of 3,725 acre-feet per year at a combined maximum diversion rate of 5.4 cfs (2,431 gpm) from Greens Bayou Diversion Reach 2;
- C. A maximum of 7,673 acre-feet per year at a combined maximum diversion rate of 11.2 cfs (5,007 gpm) from Greens Bayou Diversion Reach 3;
- D. A maximum of 11,930 acre-feet per year at a combined maximum diversion rate of 17.3 cfs (7,785 gpm) from Greens Bayou Diversion Reach 4;
- E. A maximum of 20,443 acre-feet per year at a combined maximum diversion rate of 29.7 cfs (13,340 gpm) from Greens Bayou Diversion Reach 5;
- F. A maximum of 21,188 acre-feet per year at a combined maximum diversion rate of 30.8 cfs (13,826 gpm) from Greens Bayou Diversion Reach 6;
- G. A maximum of 26,509 acre-feet per year at a combined maximum diversion rate of 38.5 cfs (17,299 gpm) from Greens Bayou Diversion Reach 7;
- H. A maximum of 27,029 acre-feet per year at a combined maximum diversion rate of 39.3 cfs (17,638 gpm) from Greens Bayou Diversion Reach 8;
- I. A maximum of 34,478 acre-feet per year at a combined maximum diversion rate of 50.1 cfs (22,499 gpm) from Greens Bayou Diversion Reach 9;
- J. A maximum of 42,194 acre-feet per year at a combined maximum diversion rate of 64.4 cfs (28,922 gpm) from Greens Bayou Diversion Reach 10;
- K. A combined maximum diversion amount of not to exceed 42,194 acre-feet per year at a maximum combined diversion rate of 64.4 cfs (28,922 gpm) from all diversion points within the ten Greens Bayou diversion reaches.

### 3. Hunting Bayou

A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.2 cfs (2,778 gpm) from Hunting Bayou Diversion Reach 1.

### 4. Sims Bayou

- A. A maximum of 7,503 acre-feet per year at a combined maximum diversion rate of 10.9 cfs (4,896 gpm) from Sims Bayou Diversion Reach 1;
- B. A maximum of 28,787 acre-feet per year at a combined maximum diversion rate of 41.9 cfs (18,785 gpm) from Sims Bayou Diversion Reach 2;
- C. A maximum of 36,236 acre-feet per year at a combined maximum diversion rate of 58.9 cfs (26,424 gpm) from Sims Bayou Diversion Reach 3;
- D. A maximum of 43,420 acre-feet per year at a combined maximum diversion rate of 63.1 cfs (28,333 gpm) from Sims Bayou Diversion Reach 4;
- E. A maximum of 81,731 acre-feet per year at a combined maximum diversion rate of 119 cfs (53,333 gpm) from Sims Bayou Diversion Reach 5;
- F. A maximum of 108,336 acre-feet per year at a combined maximum diversion rate of 199.3 cfs (89,441 gpm) from Sims Bayou Diversion Reach 6;
- G. A combined maximum diversion amount of not to exceed 108,336 acre-feet per year at a maximum combined diversion rate of 199.3 cfs (89,441 gpm) from all diversion points within the six Sims Bayou diversion reaches.

## 5. White Oak Bayou

- A. A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.19 cfs (2,778 gpm) from White Oak Bayou Diversion Reach 1;
- B. A maximum of 23,413 acre-feet per year at a combined maximum diversion rate of 34.0 cfs (15,278 gpm) from White Oak Bayou Diversion Reach 2;
- C. A maximum of 24,471 acre-feet per year at a combined maximum diversion rate of 35.6 cfs (15,969 gpm) from White Oak Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 24,471 acre-feet per year at a maximum combined diversion rate of 35.6 cfs (15,969 gpm) from all diversion points within the three White Oak Bayou diversion reaches.

The Applicant also seeks to add agricultural purpose of use to the authorized water.

The maximum diversion amounts requested in the application incorporate a channel loss factor of 5%.

The application and partial fees were received on October 22, 2020, and October 29, 2020. Additional information and fees were received on November 6, 2020, and December 4, 2020. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on December 16, 2020. The application was amended on December 1, 2022, and additional information was received on April 29, 2025.

The Executive Director has completed the technical review of the application and prepared a draft amendment. The draft amendment, if granted, would include special conditions, including, but not limited to, maintaining an accounting plan and streamflow restrictions. The application, technical memoranda, and Executive Director's draft amendment are available for viewing on the TCEQ web page at: <a href="https://www.tceq.texas.gov/permitting/water\_rights/wr-permitting/view-wr-pend-apps.">https://www.tceq.texas.gov/permitting/water\_rights/wr-permitting/view-wr-pend-apps.</a> Alternatively, you may request a copy of the documents by contacting the TCEQ Office of the Chief Clerk by phone at (512) 239-3300 or by mail at TCEQ OCC, Notice Team (MC-105), P.O. Box 13087, Austin, Texas 78711.

**PUBLIC COMMENT/PUBLIC MEETING.** Written public comments and requests for a public meeting should be submitted to the Office of the Chief Clerk, at the address provided in the information section below by October 21, 2025. A public meeting is intended for the taking of public comment and is not a contested case hearing. A public meeting will be held if the Executive Director determines that there is a significant degree of public interest in the application.

**CONTESTED CASE HEARING.** The TCEQ may grant a contested case hearing on this application if a written hearing request is filed by October 21, 2025. The Executive Director can consider an approval of the application unless a written request for a contested case hearing is filed by October 21, 2025.

To request a contested case hearing, you must submit the following: (1) your name (or for a group or association, an official representative), mailing address, daytime phone number, and fax number, if any; (2) applicant's name and permit number; (3) the statement "[*I/we*] request a contested case hearing;" (4) a brief and specific description of how you would be affected by the application in a way not common to the general public; and (5) the location and distance of your property relative to the proposed activity. You may also submit proposed conditions for the requested permit which would satisfy your concerns. Requests for a contested case hearing must be submitted in writing to the Office of the Chief Clerk at the address provided in the information section below.

If a hearing request is filed, the Executive Director will not issue the permit and will forward the application and hearing request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

**INFORMATION.** Written hearing requests, public comments or requests for a public meeting should be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a> by entering WRPERM 5827 in the search field. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address.

For additional information, individual members of the general public may contact the Public Education Program at 1-800-687-4040. General information regarding the TCEQ can be found at our web site at <a href="www.tceq.texas.gov">www.tceq.texas.gov</a>. Si desea información en Español, puede llamar al 1-800-687-4040 o por el internet al <a href="http://www.tceq.texas.gov">http://www.tceq.texas.gov</a>.

Issued: October 7, 2025

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# AMENDMENT TO A WATER USE PERMIT

PERMIT NO. 5827B TYPE § 11.122

Permittee: City of Houston Address: 611 Walker Street

Houston, Texas 77002

Filed: December 16, 2020 Granted:

Purposes: Municipal, Industrial, and Counties: Harris, Brazoria,

Agriculture Chambers, Fort Bend, and

Galveston

Watercourse: Brays Bayou, Buffalo Bayou, Greens

Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship

Channel

Basin: San Jacinto River Basin,

Trinity River Basin, San Jacinto -Brazos Coastal

Basin, Trinity-San Jacinto

Coastal Basin

WHEREAS, Water Use Permit No. 5827 (Permit), as amended, authorizes the City of Houston (City/Permittee) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties; and

WHEREAS, the City is also authorized an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area; and

WHEREAS, the Permit includes multiple special conditions, including streamflow restrictions and a requirement that diversion of discharged return flows be limited to 50% of the volume discharged on a daily basis from each WWTP; and

WHEREAS, the time priority of this water right is May 14, 2004; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on Brays Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- Brays Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.705665°
   N, Longitude 95.567322° W and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W;
- Brays Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W;
- 3. Brays Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add ten authorized diversion reaches on Greens Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- Greens Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.95056°
   N, Longitude 95.530155° W and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W;
- 2. Greens Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.954387° N, Longitude 95.435543° W and a downstream limit located at Latitude 29.94831° N, Longitude 95.401137° W;
- 3. Greens Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W;
- 4. Greens Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W and a downstream limit located at Latitude 29.939868° N, Longitude 95.34974° W;
- 5. Greens Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W;
- 6. Greens Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W;
- 7. Greens Bayou Diversion Reach 7 has an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W;
- 8. Greens Bayou Diversion Reach 8 has an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W;
- 9. Greens Bayou Diversion Reach 9 has an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W;

10. Greens Bayou Diversion Reach 10 has an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add one authorized diversion reach on Hunting Bayou between the WWTP discharge location and Buffalo Bayou in Harris County and described as follows:

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WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add six authorized diversion reaches on Sims Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- Sims Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.604109°
   N, Longitude 95.476793° W and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W;
- 2. Sims Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W;
- 3. Sims Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W;
- 4. Sims Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W;
- 5. Sims Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W and a downstream limit located at Latitude 29.708652° N, Longitude 95.256605° W;
- 6. Sims Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on White Oak Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. White Oak Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W;
- 2. White Oak Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W;
- 3. White Oak Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W; and

WHEREAS, the amendment application does not seek to change the location of the return flow discharge points, the amount that will be discharged, or the authorized diversion amounts and diversion rates in the Permit; and

WHEREAS, the 50% limitation on diversion and use of discharged return flows continues to apply to diversion of return flows under this amendment; and

WHEREAS, the City requests that the maximum diversion amounts and diversion rates in each of the diversion reaches be further limited cumulatively as follows, consistent with the discharge and diversion amounts and rates included in the Permit, as amended:

#### 1. Brays Bayou

- A. A maximum of 33,352 acre-feet per year at a combined maximum diversion rate of 48.5 cfs (21,764 gpm) from Brays Bayou Diversion Reach 1;
- B. A maximum of 65,598 acre-feet per year at a combined maximum diversion rate of 95.4 cfs (42,806 gpm) from Brays Bayou Diversion Reach 2;
- C. A maximum of 129,450 acre-feet per year at a combined maximum diversion rate of 188.2 cfs (84,472 gpm) from Brays Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 129,450 acre-feet per year at a maximum combined diversion rate of 188.2 cfs (84,472 gpm) from all diversion points within the three Brays Bayou diversion reaches.

## 2. Greens Bayou

- A. A maximum of 2,128 acre-feet per year at a combined maximum diversion rate of 3.1 cfs (1,389 gpm) from Greens Bayou Diversion Reach 1;
- B. A maximum of 3,725 acre-feet per year at a combined maximum diversion rate of 5.4 cfs (2,431 gpm) from Greens Bayou Diversion Reach 2;
- C. A maximum of 7,673 acre-feet per year at a combined maximum diversion rate of 11.2 cfs (5,007 gpm) from Greens Bayou Diversion Reach 3;
- D. A maximum of 11,930 acre-feet per year at a combined maximum diversion rate of 17.3 cfs (7,785 gpm) from Greens Bayou Diversion Reach 4;
- E. A maximum of 20,443 acre-feet per year at a combined maximum diversion rate of 29.7 cfs (13,340 gpm) from Greens Bayou Diversion Reach 5;
- F. A maximum of 21,188 acre-feet per year at a combined maximum diversion rate of 30.8 cfs (13,826 gpm) from Greens Bayou Diversion Reach 6;
- G. A maximum of 26,509 acre-feet per year at a combined maximum diversion rate of 38.5 cfs (17,299 gpm) from Greens Bayou Diversion Reach 7;
- H. A maximum of 27,029 acre-feet per year at a combined maximum diversion rate of 39.3 cfs (17,638 gpm) from Greens Bayou Diversion Reach 8;
- I. A maximum of 34,478 acre-feet per year at a combined maximum diversion rate of 50.1 cfs (22,499 gpm) from Greens Bayou Diversion Reach 9;

- J. A maximum of 42,194 acre-feet per year at a combined maximum diversion rate of 64.4 cfs (28,922 gpm) from Greens Bayou Diversion Reach 10:
- K. A combined maximum diversion amount of not to exceed 42,194 acre-feet per year at a maximum combined diversion rate of 64.4 cfs (28,922 gpm) from all diversion points within the ten Greens Bayou diversion reaches.

#### 3. Hunting Bayou

A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.2 cfs (2,778 gpm) from Hunting Bayou Diversion Reach 1.

### 4. Sims Bayou

- A. A maximum of 7,503 acre-feet per year at a combined maximum diversion rate of 10.9 cfs (4,896 gpm) from Sims Bayou Diversion Reach 1;
- B. A maximum of 28,787 acre-feet per year at a combined maximum diversion rate of 41.9 cfs (18,785 gpm) from Sims Bayou Diversion Reach 2;
- C. A maximum of 36,236 acre-feet per year at a combined maximum diversion rate of 58.9 cfs (26,424 gpm) from Sims Bayou Diversion Reach 3;
- D. A maximum of 43,420 acre-feet per year at a combined maximum diversion rate of 63.1 cfs (28,333 gpm) from Sims Bayou Diversion Reach 4;
- E. A maximum of 81,731 acre-feet per year at a combined maximum diversion rate of 119 cfs (53,333 gpm) from Sims Bayou Diversion Reach 5;
- F. A maximum of 108,336 acre-feet per year at a combined maximum diversion rate of 199.3 cfs (89,441 gpm) from Sims Bayou Diversion Reach 6;
- G. A combined maximum diversion amount of not to exceed 108,336 acre-feet per year at a maximum combined diversion rate of 199.3 cfs (89,441 gpm) from all diversion points within the six Sims Bayou diversion reaches.

## 5. White Oak Bayou

- A. A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.19 cfs (2,778 gpm) from White Oak Bayou Diversion Reach 1;
- B. A maximum of 23,413 acre-feet per year at a combined maximum diversion rate of 34.0 cfs (15,278 gpm) from White Oak Bayou Diversion Reach 2;
- C. A maximum of 24,471 acre-feet per year at a combined maximum diversion rate of 35.6 cfs (15,969 gpm) from White Oak Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 24,471 acre-feet per year at a maximum combined diversion rate of 35.6 cfs (15,969 gpm) from all diversion points within the three White Oak Bayou diversion reaches; and

WHEREAS, the City also seeks to add agricultural purpose of use to the authorized water; and

WHEREAS, the maximum diversion amounts requested in the application incorporate a channel loss factor of 5%; and

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

WHEREAS, the Executive Director recommends that special conditions be included in the amendment to clarify the applicability of the existing streamflow restrictions in the Permit, as amended; and

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

NOW, THEREFORE, this amendment to Water Use Permit No. 5827, designated Water Use Permit No. 5827B, is issued to the City of Houston subject to the following terms and conditions:

#### 1. USE

In addition to previous authorizations, Permittee is authorized to divert and use not to exceed a total of 308,708 acre-feet per year of the 580,923 acre-feet of return flows originating from groundwater, interbasin transfer of surface water, and San Jacinto River Basin water rights per year, currently authorized to be reused under Water Use Permit No. 5827, from 23 diversion reaches on Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou, San Jacinto River Basin, for municipal, industrial, and agricultural purposes in the following cumulative amounts:

- A. From Brays Bayou Diversion Reaches 1-3: 129,450 acre-feet per year.
- B. From Greens Bayou Diversion Reaches 1-10: 42,194 acre-feet per year.
- C. From Hunting Bayou Diversion Reach 1: 4,257 acre-feet per year.
- D. From Sims Bayou Diversion Reaches 1-6: 108,336 acre-feet per year.
- E. From White Oak Bayou Diversion Reaches 1-3: 24,471 acre-feet per year.
- F. Permittee's maximum combined diversion amount from all diversion points within the 23 diversion reaches shall not exceed 308,708 acre-feet per year.

#### 2. DIVERSION

- A. In addition to previous authorizations, Permittee is authorized to divert from 23 diversion reaches on Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou described as follows:
  - 1. Brays Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.705665° N, Longitude 95.567322° W and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W.
  - 2. Brays Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W.

- 3. Brays Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W.
- 4. Greens Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.95056° N, Longitude 95.530155° W and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W.
- 5. Greens Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.954387° N, Longitude 95.435543° W and a downstream limit located at Latitude 29.94831° N, Longitude 95.401137° W.
- 6. Greens Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W.
- 7. Greens Bayou Diversion Reach 4 with an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W and a downstream limit located at Latitude 29.939868° N, Longitude 95.34974° W.
- 8. Greens Bayou Diversion Reach 5 with an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W.
- 9. Greens Bayou Diversion Reach 6 with an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W.
- 10. Greens Bayou Diversion Reach 7 with an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W.
- 11. Greens Bayou Diversion Reach 8 with an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W.
- 12. Greens Bayou Diversion Reach 9 with an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W.
- 13. Greens Bayou Diversion Reach 10 with an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W.
- 14. Hunting Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.806304° N, Longitude 95.294696° W and a downstream limit located at Latitude 29.737557° N, Longitude 95.212222° W.
- 15. Sims Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.604109° N, Longitude 95.476793° W and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W.
- 16. Sims Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W.

- 17. Sims Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W.
- 18. Sims Bayou Diversion Reach 4 with an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W.
- 19. Sims Bayou Diversion Reach 5 with an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W and a downstream limit located at Latitude 29.708652° N, Longitude 95.256605° W.
- 20. Sims Bayou Diversion Reach 6 with an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W.
- 21. White Oak Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W.
- 22. White Oak Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W.
- 23. White Oak Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W.

#### B. Diversion Rates:

- 1. A combined maximum diversion rate of 188.2 cfs (84,472 gpm) for all diversion points located within Brays Bayou Diversion Reaches 1-3.
- 2. A combined maximum diversion rate of 64.4 cfs (28,922 gpm) for all diversion points located within Greens Bayou Diversion Reaches 1-10.
- 3. A combined maximum diversion rate of 6.2 cfs (2,778 gpm) for all diversion points located within Hunting Bayou Diversion Reach 1.
- 4. A combined maximum diversion rate of 199.3 cfs (89,441 gpm) for all diversion points located within Sims Bayou Diversion Reaches 1-6.
- 5. A combined maximum diversion rate of 35.6 cfs (15,969 gpm) for all diversion points located within White Oak Bayou Diversion Reaches 1-3.

#### 3. CONSERVATION

Permittee shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into on or after the effective date of this permit, including any contract extension or renewal, that each successive wholesale

customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

#### 4. SPECIAL CONDITIONS

- A. Ninety days prior to the diversion of water for agricultural use, Permittee or contract customer shall submit a water conservation plan to the TCEQ that meets the requirements of 30 Texas Administrative Code §288.4.
- B. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens on any new diversion structure(s).
- C. In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reaches 1 and 2, shall be limited to times when streamflow immediately downstream of the measurement point at Southwest Wastewater Treatment Plant equals or exceeds the following values.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
38.74	38.20	48.96	50.58	53.80	53.80	53.80	54.88	57.88	34.26	35.15	35.87

cfs = cubic feet per second

D. In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reach 3, shall be limited to times when streamflow immediately downstream of the measurement point at McGregor Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

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54.49 53.73	68.87	71.14	75.68	75.68	75.68	77.19	77.19	48.18	49.44	50.45

cfs = cubic feet per second

E. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 1 through 8, shall be limited to times when streamflow immediately downstream of the measurement point at Brock Park equals or exceeds the following values.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36.54	37.98	50.52	45.14	46.22	48.37	41.92	40.84	41.92	30.53	30.53	33.68

cfs = cubic feet per second

F. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 9 and 10, shall be limited to times when streamflow immediately downstream of the measurement point at Northeast Wastewater Treatment Plant equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
41.17	42.78	56.91	50.85	52.07	54.49	47.22	46.01	47.22	34.39	34.39	37.94

cfs = cubic feet per second

G. In order to provide sufficient flow for instream uses of Hunting Bayou, diversions from Reach 1, shall be limited to times when streamflow immediately downstream of the measurement point at Herman Brown Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4.97	4.97	6.41	5.44	5.59	5.81	5.14	4.40	4.99	3.53	3.53	4.17

cfs = cubic feet per second

H. In order to provide sufficient flow for instream uses of Sims Bayou, diversions from Reaches 1 through 6, shall be limited to times when streamflow immediately downstream of the measurement point at Reveille Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20.00	20.00	22.46	20.00	22.46	22.46	20.58	20.58	22.46	20.00	20.00	20.00

cfs = cubic feet per second

I. In order to provide sufficient flow for instream uses of White Oak Bayou, diversions from Reaches 1 through 3, shall be limited to times when streamflow immediately downstream of the measurement point at Stude Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26.86	26.86	30.60	26.86	26.86	28.80	27.00	27.00	26.86	26.86	26.86	26.86

cfs = cubic feet per second

- J. Permittee shall only divert and use return flows pursuant to Paragraph 1. USE and Paragraph 2. DIVERSION in accordance with the most recently approved accounting plan. Permittee shall maintain the plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the accounting plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittee fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittee shall immediately cease diversion of discharged return flows, and either apply to amend the permit, or voluntarily forfeit the permit. If Permittee fails to amend the accounting plan or forfeit the permit, the Commission may begin proceedings to cancel the permit. Permittee shall immediately notify the Executive Director upon modification of the accounting plan and provide copies of the appropriate documents effectuating such changes.
- K. Permittee shall install and maintain a measuring device which accounts for, within 5% accuracy, the quantity of water diverted from the reaches authorized above in Paragraph 2. DIVERSION and maintain measurement records.
- L. Permittee shall allow representatives of the Texas Commission on Environmental Quality reasonable access to inspect any measuring devices and records.

This amendment is issued subject to all terms, conditions, and provisions contained in Water Use Permit No. 5827, as amended, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the San Jacinto River Basin.

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

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

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

	For the Commission
Date Issued:	

## **Texas Commission on Environmental Quality**

#### INTEROFFICE MEMORANDUM

To: Hal Bailey, Project Manager Date: April 28, 2025

Water Rights Permitting Team

Through: Kathy Alexander, Ph.D., Policy and Technical Analyst Water Availability Division

Trent Gay, Team Leader Surface Water Availability Team

From: Andrew Garcia, Hydrologist

Surface Water Availability Team

Subject: City of Houston

WRPERM 5827 CN600128995

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, White Oak Bayou, and Houston Ship Channel

San Jacinto River Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

#### **HYDROLOGY REVIEW**

# **Application Summary**

Water Use Permit No. 5827 (Permit) authorizes the City of Houston (City) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The Permit also includes an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

The City requests to amend the Permit to add three diversion reaches on Brays Bayou to divert 129,450 acre-feet per year, at a maximum combined diversion rate of 188 cfs (84,472 gpm); to add ten diversion reaches on Greens Bayou to divert 42,194 acre-feet per year, at a maximum combined diversion rate of 61.3 cfs (27,533 gpm); to add one diversion reach on Hunting Bayou to divert

City of Houston, WRPERM 5827
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin
Page 2 of 3

4,257 acre-feet per year, at a maximum diversion rate of 6.19 cfs (2,778 gpm); to add six diversions reaches on Sims Bayou to divert 108,336 acre-feet per year, at a maximum combined diversion rate of 158 cfs (70,694 gpm); and to add 3 diversion reaches on White Oak Bayou to divert 24,471 acre-feet per year, at a maximum combined diversion rate of 35.6 cfs (15,969 gpm).

The City also requests to amend the Permit to add agricultural purpose of use.

The application was declared administratively complete on December 16, 2020.

### **Hydrology Review**

Resource Protection Staff did not recommend new instream flow requirements for this application; however, they did clarify how the existing streamflow restrictions would apply to the amendment. See Resource Protection staff's March 31, 2025 memorandum.

The application does not request a new appropriation of water; therefore, a water availability analysis is not necessary. However, the application must be reviewed to ensure no water rights are affected by the request.

In evaluating whether adding three diversion reaches on Brays Bayou, ten diversion reaches on Greens Bayou, one diversion reach on Hunting Bayou, six diversion reaches on Sims Bayou, and three diversion reaches on White Oak Bayou would affect senior water rights, staff notes that no water rights can be affected because the conveyance of return flows is already authorized, and the application does not request an increase in the authorized diversion rate or amount of water to be diverted. In addition, the request to add multiple diversion reaches will be more protective of other water rights because the diversion rates in each reach will be limited to the amounts and rates of return flows discharged directly upstream of each diversion reach.

#### Conclusion

Staff can support granting the application provided the following special conditions are included in the amendment:

1. Permittee shall only divert and use return flows pursuant to Paragraph 1. USE and Paragraph 2. DIVERSION in accordance with the most recently approved accounting plan. Permittee shall maintain the plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the accounting plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittee fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittee shall immediately cease diversion of discharged return flows, and either apply to amend the permit, or voluntarily forfeit the permit. If Permittee fails to amend the accounting

City of Houston, WRPERM 5827 Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 3 of 3

plan or forfeit the permit, the Commission may begin proceedings to cancel the permit. Permittee shall immediately notify the Executive Director upon modification of the accounting plan and provide copies of the appropriate documents effectuating such changes.

Andrew Garcia
Andrew Garcia, Hydrologist

## **Hal Bailey**

From: Chris Kozlowski

**Sent:** Thursday, October 2, 2025 9:56 AM

To: Michael Pinckney; Hal Bailey; David Harkins

**Cc:** Humberto Galvan

**Subject:** Re: City of Houston Application No. 5827B Draft Amendment/Notice Applicant Review

Mr. Pinckney,

Thank you for your comments.

We made the typographic correction to the Hydrology Memo you mentioned and will be proceeding to notice.

Chris Kozlowski, Team Leader Water Rights Permitting Team Water Rights Permitting & Availability Section Texas Commission on Environmental Quality (512)239-1801

Chris.Kozlowski@tceq.texas.gov

From: Michael Pinckney

Sent: Wednesday, October 1, 2025 11:27 AM

To: Hal Bailey <Hal.Bailey@tceq.texas.gov>; David Harkins <

Cc: Humberto Galvan < Humberto.Galvan@tceq.texas.gov >; Chris Kozlowski < chris.kozlowski@tceq.texas.gov >

Subject: RE: City of Houston Application No. 5827B Draft Amendment/Notice Applicant Review

Hal,

Please find the attached comment response letter for the draft public notice and draft amendment B of Water Use Permit 5827.

Thank you.

# Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

/ carollo.com



\*Professional registration in Texas



carollo.com



September 30, 2025

Hal Bailey, Jr. Texas Commission on Environmental Quality Bldg E, 12100 Park 35 Circle Austin, Texas 78711-3087

Subject: City of Houston Application No. 5827B to Amend Water Use Permit No. 5827

Dear Mr. Bailey:

Thank you for the opportunity to review the draft public notice and draft amendment for Water Use Permit 5827. The City of Houston and its consultants have reviewed the draft public notice and draft amendment. We have no formal comments regarding the draft public notice and draft amendment and find everything to be in order. We would like to note that there is a mistake on page 2 of the Hydrology Review Memo where the memo states that the administratively complete date is August 25, 2022, instead of the correct date of December 16, 2020.

Sincerely,

CAROLLO ENGINEERS, INC.

Michael Pinckney, PE CFM Senior Engineer

AuthorInitials:jmp

cc: David Harkins, PhD, PE

## **Hal Bailey**

From: Hal Bailey

**Sent:** Friday, September 5, 2025 3:16 PM

To: Michael Pinckney

**Cc:** Humberto Galvan; Chris Kozlowski

**Subject:** RE: City of Houston Application No. 5827B Draft Amendment/Notice Applicant Review

**Attachments:** City of Houston\_5827B\_Extension Letter\_09.05.2025.pdf

#### Good afternoon Michael,

Please see the attached extension approval letter for application no. 5827B and provide any comments on the draft amendment and notice by COB on 09/30/2025.

Thank you,

Hal E. Bailey, Jr.

Natural Resources Specialist IV

Water Rights Permitting Team

Water Rights Permitting and Availability Section

Phone: 512-239-4615

From: Michael Pinckney

**Sent:** Thursday, September 4, 2025 11:48 AM **To:** Hal Bailey <Hal.Bailey@tceq.texas.gov>

Cc: Humberto Galvan < Humberto. Galvan@tceq.texas.gov>; Chris Kozlowski < chris.kozlowski@tceq.texas.gov>; David

Harkins < >; Emily Rogers < >

Subject: RE: City of Houston Application No. 5827B Draft Amendment/Notice Applicant Review

Thank you Hal,

We haven't quite finished our review and I would like to request an extension to provide comments by September 30<sup>th</sup> 2025.

Thank you.

## Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

/ carollo.com



\*Professional registration in Texas

From: Hal Bailey < Hal.Bailey@tceq.texas.gov >

Sent: Tuesday, August 19, 2025 3:55 PM

To: Michael Pinckney <

Cc: Humberto Galvan < Humberto. Galvan@tceq.texas.gov >; Chris Kozlowski @tceq.texas.gov > Subject: City of Houston Application No. 5827B Draft Amendment/Notice Applicant Review

CAUTION: This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Good afternoon Mr. Pinckney,

Electronic copies of the drafts of the public notice and proposed amendment to water use permit no. 5827 are attached.

Also attached are copies of the related technical memoranda. Please review the draft documents and provide any comments and/or edits by COB on 09/02/2025.

If you have any questions, please let me know.

Thank you,

Hal E. Bailey, Jr. Natural Resources Specialist IV Water Rights Permitting Team Water Rights Permitting and Availability Section

Phone: 512-239-4615

Brooke T. Paup, Chairwoman Bobby Janecka, Commissioner Catarina R. Gonzales. Commissioner Kelly Keel, Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 5, 2025

Mr. Michael Pinckney, PE, CFM Carollo Engineers. Inc. 10900 Stonelake Blvd., Building 2, Suite 126 Austin, TX 78759-5795

VIA E-MAIL

Re: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827 Texas Water Code § 11.122, Requiring Limited Mailed Notice Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, and White Oak Bayou, San Jacinto River Basin, Trinity River Basin San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston Counties

Dear Mr. Pinckney:

This acknowledges receipt, on September 4, 2025, of the applicant's request for an extension until September 30, 2025 to review and provide written comments to the draft public notice and amendment dated August 19, 2025.

The extension request is granted until September 30, 2025. Please review the drafts and contact me no later than September 30, 2025 with any comments or questions as the public notice will be forwarded to the Office of the Chief Clerk for mailing after that date.

If you have any questions concerning the application, please contact Hal Bailey, Jr. via e-mail at hal.bailey@tceq.texas.gov or by telephone at (512) 239-4615.

Sincerely.

Bert Galvan, Manager Water Rights Permitting and Availability Section Water Availability Division

BG/hb

Brooke T. Paup, *Chairwoman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 19, 2025

Mr. Michael Pinckney, PE, CFM Carollo Engineers, Inc. 10900 Stonelake Blvd., Building 2, Suite 126 Austin, TX 78759-5795 VIA E-MAIL

RE: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827 Texas Water Code § 11.122, Requiring Limited Mailed Notice Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, and White Oak Bayou,

San Jacinto River Basin, Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston Counties

#### Mr. Pinckney:

Drafts, subject to revision, of the public notice, proposed amendment to Water Use Permit No. 5827, and related technical memoranda are attached.

Staff is recommending that the referenced application be granted in accordance with the attached drafts. Please review the drafts and contact me no later than September 2, 2025 with any comments or questions as the notice will be forwarded to the Office of the Chief Clerk for mailing after that date.

Please note this application requires a two-week comment period and once the comment period has closed, the proposed amendment to Water Use Permit No. 5827 may be issued as drafted given no hearing requests are received.

If you have any questions concerning the application, please contact me via email at hal.bailey@tceq.texas.gov or by telephone at (512) 239-4615.

Sincerely,

Hal E. Bailey, Jr., Project Manager Water Rights Permitting Team

Water Rights Permitting and Availability Section

Attachments

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# NOTICE OF AN APPLICATION TO AMEND A WATER USE PERMIT

#### APPLICATION NO. 5827B

The City of Houston seeks to amend Water Use Permit No. 5827 to add 23 diversion reaches for its authorized return flows on Brays, Greens, Hunting, Sims, and White Oak Bayous, from the City's upper-most wastewater treatment plant discharge locations and extending down to Buffalo Bayou in Harris County, San Jacinto River Basin and to add agricultural purposes of use to the water authorized for diversion. More information on the application and how to participate in the permitting process is given below.

APPLICATION. City of Houston, 611 Walker Street, Houston, Texas 77002, Applicant, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Water Use Permit No. 5827 pursuant to Texas Water Code (TWC) § 11.122 and TCEQ Rules Title 30 Texas Administrative Code (TAC) §§ 295.1, et seq. Notice is being mailed to the interjacent water rights holders of record in the San Jacinto River Basin pursuant to Title 30 TAC § 295.158(c)(3)(D).

Water Use Permit No. 5827 (Permit), as amended, authorizes the City of Houston (City/Applicant) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The City is also authorized an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

The Permit includes multiple special conditions, including streamflow restrictions and a requirement that diversion of discharged return flows be limited to 50% of the volume discharged on a daily basis from each WWTP.

The time priority of this water right is May 14, 2004.

The Applicant seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on Brays Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Brays Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.705665° N, Longitude 95.567322° W, in ZIP Code 77072 and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W, in ZIP Code 77074;
- 2. Brays Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W, in ZIP Code 77074 and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W, in ZIP Code 77096;
- 3. Brays Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W, in ZIP Code 77096 and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W, in ZIP Code 77012.

The Applicant seeks to amend Water Use Permit No. 5827 to add ten authorized diversion reaches on Greens Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Greens Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.95056° N, Longitude 95.530155° W, in ZIP Code 77064 and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W, in ZIP Code 77067;
- 2. Greens Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.954387° N, Longitude 95.435543° W, in ZIP Code 77067 and a downstream limit located at Latitude 29.94831° N, Longitude 95.401137° W, in ZIP Code 77060;
- 3. Greens Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W, in ZIP Code 77060 and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W, in ZIP Code 77060;
- 4. Greens Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W, in ZIP Code 77060 and a downstream limit located at Latitude 29.939868° N, Longitude 95.34974° W, in ZIP Code 77032;
- 5. Greens Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W, in ZIP Code 77032 and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W, in ZIP Code 77050;
- 6. Greens Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W, in ZIP Code 77050 and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W, in ZIP Code 77050;
- 7. Greens Bayou Diversion Reach 7 has an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W, in ZIP Code 77050 and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W, in ZIP Code 77078;
- 8. Greens Bayou Diversion Reach 8 has an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W, in ZIP Code 77078 and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W, in ZIP Code 77078;

- 9. Greens Bayou Diversion Reach 9 has an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W, in ZIP Code 77078 and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W, in ZIP Code 77013;
- 10. Greens Bayou Diversion Reach 10 has an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W, in ZIP Code 77013 and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W, in ZIP Code 77015.

The Applicant seeks to amend Water Use Permit No. 5827 to add one authorized diversion reach on Hunting Bayou between the WWTP discharge location and Buffalo Bayou in Harris County and described as follows:

Hunting Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.806304° N, Longitude 95.294696° W, in ZIP Code 77028 and a downstream limit located at Latitude 29.737557° N, Longitude 95.212222° W, in ZIP Code 77015.

The Applicant seeks to amend Water Use Permit No. 5827 to add six authorized diversion reaches on Sims Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. Sims Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.604109° N, Longitude 95.476793° W, in ZIP Code 77085 and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W, in ZIP Code 77045;
- 2. Sims Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W, in ZIP Code 77045 and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W, in ZIP Code 77048;
- 3. Sims Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W, in ZIP Code 77048 and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W, in ZIP Code 77017;
- 4. Sims Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W, in ZIP Code 77017;
- 5. Sims Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.708652° N, Longitude 95.256605° W, in ZIP Code 77017;
- 6. Sims Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W, in ZIP Code 77017 and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W, in ZIP Code 77017.

The Applicant seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on White Oak Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

1. White Oak Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W, in ZIP Code 77040 and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W, in ZIP Code 77091;

- 2. White Oak Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W, in ZIP Code 77091 and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W, in ZIP Code 77018;
- 3. White Oak Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W, in ZIP Code 77018 and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W, in ZIP Code 77002.

The amendment application does not seek to change the location of the return flow discharge points, the amount that will be discharged, or the authorized diversion amounts and diversion rates in the Permit.

The 50% limitation on diversion and use of discharged return flows continues to apply to diversion of return flows under this amendment.

The Applicant requests that the maximum diversion amounts and diversion rates in each of the diversion reaches be further limited cumulatively as follows, consistent with the discharge and diversion amounts and rates included in the Permit, as amended:

### 1. Brays Bayou

- A. A maximum of 33,352 acre-feet per year at a combined maximum diversion rate of 48.5 cfs (21,764 gpm) from Brays Bayou Diversion Reach 1;
- B. A maximum of 65,598 acre-feet per year at a combined maximum diversion rate of 95.4 cfs (42,806 gpm) from Brays Bayou Diversion Reach 2;
- C. A maximum of 129,450 acre-feet per year at a combined maximum diversion rate of 188.2 cfs (84,472 gpm) from Brays Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 129,450 acre-feet per year at a maximum combined diversion rate of 188.2 cfs (84,472 gpm) from all diversion points within the three Brays Bayou diversion reaches.

#### 2. Greens Bayou

- A. A maximum of 2,128 acre-feet per year at a combined maximum diversion rate of 3.1 cfs (1,389 gpm) from Greens Bayou Diversion Reach 1;
- B. A maximum of 3,725 acre-feet per year at a combined maximum diversion rate of 5.4 cfs (2,431 gpm) from Greens Bayou Diversion Reach 2;
- C. A maximum of 7,673 acre-feet per year at a combined maximum diversion rate of 11.2 cfs (5,007 gpm) from Greens Bayou Diversion Reach 3;
- D. A maximum of 11,930 acre-feet per year at a combined maximum diversion rate of 17.3 cfs (7,785 gpm) from Greens Bayou Diversion Reach 4;
- E. A maximum of 20,443 acre-feet per year at a combined maximum diversion rate of 29.7 cfs (13,340 gpm) from Greens Bayou Diversion Reach 5;
- F. A maximum of 21,188 acre-feet per year at a combined maximum diversion rate of 30.8 cfs (13,826 gpm) from Greens Bayou Diversion Reach 6;

- G. A maximum of 26,509 acre-feet per year at a combined maximum diversion rate of 38.5 cfs (17,299 gpm) from Greens Bayou Diversion Reach 7;
- H. A maximum of 27,029 acre-feet per year at a combined maximum diversion rate of 39.3 cfs (17,638 gpm) from Greens Bayou Diversion Reach 8;
- I. A maximum of 34,478 acre-feet per year at a combined maximum diversion rate of 50.1 cfs (22,499 gpm) from Greens Bayou Diversion Reach 9;
- J. A maximum of 42,194 acre-feet per year at a combined maximum diversion rate of 64.4 cfs (28,922 gpm) from Greens Bayou Diversion Reach 10;
- K. A combined maximum diversion amount of not to exceed 42,194 acre-feet per year at a maximum combined diversion rate of 64.4 cfs (28,922 gpm) from all diversion points within the ten Greens Bayou diversion reaches.

## 3. Hunting Bayou

A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.2 cfs (2,778 gpm) from Hunting Bayou Diversion Reach 1.

## 4. Sims Bayou

- A. A maximum of 7,503 acre-feet per year at a combined maximum diversion rate of 10.9 cfs (4,896 gpm) from Sims Bayou Diversion Reach 1;
- B. A maximum of 28,787 acre-feet per year at a combined maximum diversion rate of 41.9 cfs (18,785 gpm) from Sims Bayou Diversion Reach 2;
- C. A maximum of 36,236 acre-feet per year at a combined maximum diversion rate of 58.9 cfs (26,424 gpm) from Sims Bayou Diversion Reach 3;
- D. A maximum of 43,420 acre-feet per year at a combined maximum diversion rate of 63.1 cfs (28,333 gpm) from Sims Bayou Diversion Reach 4;
- E. A maximum of 81,731 acre-feet per year at a combined maximum diversion rate of 119 cfs (53,333 gpm) from Sims Bayou Diversion Reach 5;
- F. A maximum of 108,336 acre-feet per year at a combined maximum diversion rate of 199.3 cfs (89,441 gpm) from Sims Bayou Diversion Reach 6;
- G. A combined maximum diversion amount of not to exceed 108,336 acre-feet per year at a maximum combined diversion rate of 199.3 cfs (89,441 gpm) from all diversion points within the six Sims Bayou diversion reaches.

#### 5. White Oak Bayou

- A. A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.19 cfs (2,778 gpm) from White Oak Bayou Diversion Reach 1;
- B. A maximum of 23,413 acre-feet per year at a combined maximum diversion rate of 34.0 cfs (15,278 gpm) from White Oak Bayou Diversion Reach 2;

- C. A maximum of 24,471 acre-feet per year at a combined maximum diversion rate of 35.6 cfs (15,969 gpm) from White Oak Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 24,471 acre-feet per year at a maximum combined diversion rate of 35.6 cfs (15,969 gpm) from all diversion points within the three White Oak Bayou diversion reaches.

The Applicant also seeks to add agricultural purpose of use to the authorized water.

The maximum diversion amounts requested in the application incorporate a channel loss factor of 5%.

The application and partial fees were received on October 22, 2020, and October 29, 2020. Additional information and fees were received on November 6, 2020, and December 4, 2020. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on December 16, 2020. The application was amended on December 1, 2022, and additional information was received on April 29, 2025.

The Executive Director has completed the technical review of the application and prepared a draft amendment. The draft amendment, if granted, would include special conditions, including, but not limited to, maintaining an accounting plan and streamflow restrictions. The application, technical memoranda, and Executive Director's draft amendment are available for viewing on the TCEQ web page at: <a href="https://www.tceq.texas.gov/permitting/water\_rights/wr-permitting/view-wr-pend-apps.">https://www.tceq.texas.gov/permitting/water\_rights/wr-permitting/view-wr-pend-apps.</a> Alternatively, you may request a copy of the documents by contacting the TCEQ Office of the Chief Clerk by phone at (512) 239-3300 or by mail at TCEQ OCC, Notice Team (MC-105), P.O. Box 13087, Austin, Texas 78711.

PUBLIC COMMENT/PUBLIC MEETING. Written public comments and requests for a public meeting should be submitted to the Office of the Chief Clerk, at the address provided in the information section below by\_\_\_\_\_\_. A public meeting is intended for the taking of public comment and is not a contested case hearing. A public meeting will be held if the Executive Director determines that there is a significant degree of public interest in the application.

CONTESTED CASE HEARING. The TCEQ may grant a contested case hearing on this application if a written hearing request is filed by\_\_\_\_\_\_. The Executive Director can consider an approval of the application unless a written request for a contested case hearing is filed by \_\_\_\_\_\_2025.

To request a contested case hearing, you must submit the following: (1) your name (or for a group or association, an official representative), mailing address, daytime phone number, and fax number, if any; (2) applicant's name and permit number; (3) the statement "[I/we] request a contested case hearing;" (4) a brief and specific description of how you would be affected by the application in a way not common to the general public; and (5) the location and distance of your property relative to the proposed activity. You may also submit proposed conditions for the requested permit which would satisfy your concerns. Requests for a contested case hearing must be submitted in writing to the Office of the Chief Clerk at the address provided in the information section below.

If a hearing request is filed, the Executive Director will not issue the permit and will forward the application and hearing request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

INFORMATION. Written hearing requests, public comments or requests for a public meeting should be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a> by entering WRPERM 5827 in the search field. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address.

For additional information, individual members of the general public may contact the Public Education Program at 1-800-687-4040. General information regarding the TCEQ can be found at our web site at <a href="www.tceq.texas.gov">www.tceq.texas.gov</a>. Si desea información en Español, puede llamar al 1-800-687-4040 o por el internet al <a href="http://www.tceq.texas.gov">http://www.tceq.texas.gov</a>.

Issued:

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# AMENDMENT TO A WATER USE PERMIT

PERMIT NO. 5827B TYPE § 11.122

Permittee: City of Houston Address: 611 Walker Street

Houston, Texas 77002

Filed: December 16, 2020 Granted:

Purposes: Municipal, Industrial, and Counties: Harris, Brazoria,

Agriculture Chambers, Fort Bend, and

Galveston

Watercourse: Brays Bayou, Buffalo Bayou, Greens

Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship

Channel

Basin: San Jacinto River Basin,

Trinity River Basin, San Jacinto -Brazos Coastal

Basin, Trinity-San Jacinto

Coastal Basin

WHEREAS, Water Use Permit No. 5827 (Permit), as amended, authorizes the City of Houston (City/Permittee) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and White Oak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties; and

WHEREAS, the City is also authorized an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area; and

WHEREAS, the Permit includes multiple special conditions, including streamflow restrictions and a requirement that diversion of discharged return flows be limited to 50% of the volume discharged on a daily basis from each WWTP; and

WHEREAS, the time priority of this water right is May 14, 2004; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on Brays Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- Brays Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.705665°
   N, Longitude 95.567322° W and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W;
- Brays Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W;
- 3. Brays Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add ten authorized diversion reaches on Greens Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- Greens Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.95056°
   N, Longitude 95.530155° W and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W;
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- 3. Greens Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W;
- 4. Greens Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W and a downstream limit located at Latitude 29.939868° N, Longitude 95.34974° W;
- 5. Greens Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W;
- 6. Greens Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W;
- 7. Greens Bayou Diversion Reach 7 has an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W;
- 8. Greens Bayou Diversion Reach 8 has an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W;
- 9. Greens Bayou Diversion Reach 9 has an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W;

10. Greens Bayou Diversion Reach 10 has an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add one authorized diversion reach on Hunting Bayou between the WWTP discharge location and Buffalo Bayou in Harris County and described as follows:

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   N, Longitude 95.476793° W and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W;
- 2. Sims Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W;
- 3. Sims Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W;
- 4. Sims Bayou Diversion Reach 4 has an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W;
- 5. Sims Bayou Diversion Reach 5 has an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W and a downstream limit located at Latitude 29.708652° N, Longitude 95.256605° W;
- 6. Sims Bayou Diversion Reach 6 has an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W; and

WHEREAS, the City seeks to amend Water Use Permit No. 5827 to add three authorized diversion reaches on White Oak Bayou between the uppermost WWTP discharge location and extending downstream to Buffalo Bayou in Harris County and described as follows:

- 1. White Oak Bayou Diversion Reach 1 has an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W;
- 2. White Oak Bayou Diversion Reach 2 has an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W;
- 3. White Oak Bayou Diversion Reach 3 has an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W; and

WHEREAS, the amendment application does not seek to change the location of the return flow discharge points, the amount that will be discharged, or the authorized diversion amounts and diversion rates in the Permit; and

WHEREAS, the 50% limitation on diversion and use of discharged return flows continues to apply to diversion of return flows under this amendment; and

WHEREAS, the City requests that the maximum diversion amounts and diversion rates in each of the diversion reaches be further limited cumulatively as follows, consistent with the discharge and diversion amounts and rates included in the Permit, as amended:

### 1. Brays Bayou

- A. A maximum of 33,352 acre-feet per year at a combined maximum diversion rate of 48.5 cfs (21,764 gpm) from Brays Bayou Diversion Reach 1;
- B. A maximum of 65,598 acre-feet per year at a combined maximum diversion rate of 95.4 cfs (42,806 gpm) from Brays Bayou Diversion Reach 2;
- C. A maximum of 129,450 acre-feet per year at a combined maximum diversion rate of 188.2 cfs (84,472 gpm) from Brays Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 129,450 acre-feet per year at a maximum combined diversion rate of 188.2 cfs (84,472 gpm) from all diversion points within the three Brays Bayou diversion reaches.

### 2. Greens Bayou

- A. A maximum of 2,128 acre-feet per year at a combined maximum diversion rate of 3.1 cfs (1,389 gpm) from Greens Bayou Diversion Reach 1;
- B. A maximum of 3,725 acre-feet per year at a combined maximum diversion rate of 5.4 cfs (2,431 gpm) from Greens Bayou Diversion Reach 2;
- C. A maximum of 7,673 acre-feet per year at a combined maximum diversion rate of 11.2 cfs (5,007 gpm) from Greens Bayou Diversion Reach 3;
- D. A maximum of 11,930 acre-feet per year at a combined maximum diversion rate of 17.3 cfs (7,785 gpm) from Greens Bayou Diversion Reach 4;
- E. A maximum of 20,443 acre-feet per year at a combined maximum diversion rate of 29.7 cfs (13,340 gpm) from Greens Bayou Diversion Reach 5;
- F. A maximum of 21,188 acre-feet per year at a combined maximum diversion rate of 30.8 cfs (13,826 gpm) from Greens Bayou Diversion Reach 6;
- G. A maximum of 26,509 acre-feet per year at a combined maximum diversion rate of 38.5 cfs (17,299 gpm) from Greens Bayou Diversion Reach 7;
- H. A maximum of 27,029 acre-feet per year at a combined maximum diversion rate of 39.3 cfs (17,638 gpm) from Greens Bayou Diversion Reach 8;
- I. A maximum of 34,478 acre-feet per year at a combined maximum diversion rate of 50.1 cfs (22,499 gpm) from Greens Bayou Diversion Reach 9;

- J. A maximum of 42,194 acre-feet per year at a combined maximum diversion rate of 64.4 cfs (28,922 gpm) from Greens Bayou Diversion Reach 10:
- K. A combined maximum diversion amount of not to exceed 42,194 acre-feet per year at a maximum combined diversion rate of 64.4 cfs (28,922 gpm) from all diversion points within the ten Greens Bayou diversion reaches.

### 3. Hunting Bayou

A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.2 cfs (2,778 gpm) from Hunting Bayou Diversion Reach 1.

### 4. Sims Bayou

- A. A maximum of 7,503 acre-feet per year at a combined maximum diversion rate of 10.9 cfs (4,896 gpm) from Sims Bayou Diversion Reach 1;
- B. A maximum of 28,787 acre-feet per year at a combined maximum diversion rate of 41.9 cfs (18,785 gpm) from Sims Bayou Diversion Reach 2;
- C. A maximum of 36,236 acre-feet per year at a combined maximum diversion rate of 58.9 cfs (26,424 gpm) from Sims Bayou Diversion Reach 3;
- D. A maximum of 43,420 acre-feet per year at a combined maximum diversion rate of 63.1 cfs (28,333 gpm) from Sims Bayou Diversion Reach 4;
- E. A maximum of 81,731 acre-feet per year at a combined maximum diversion rate of 119 cfs (53,333 gpm) from Sims Bayou Diversion Reach 5;
- F. A maximum of 108,336 acre-feet per year at a combined maximum diversion rate of 199.3 cfs (89,441 gpm) from Sims Bayou Diversion Reach 6;
- G. A combined maximum diversion amount of not to exceed 108,336 acre-feet per year at a maximum combined diversion rate of 199.3 cfs (89,441 gpm) from all diversion points within the six Sims Bayou diversion reaches.

### 5. White Oak Bayou

- A. A maximum of 4,257 acre-feet per year at a combined maximum diversion rate of 6.19 cfs (2,778 gpm) from White Oak Bayou Diversion Reach 1;
- B. A maximum of 23,413 acre-feet per year at a combined maximum diversion rate of 34.0 cfs (15,278 gpm) from White Oak Bayou Diversion Reach 2;
- C. A maximum of 24,471 acre-feet per year at a combined maximum diversion rate of 35.6 cfs (15,969 gpm) from White Oak Bayou Diversion Reach 3;
- D. A combined maximum diversion amount of not to exceed 24,471 acre-feet per year at a maximum combined diversion rate of 35.6 cfs (15,969 gpm) from all diversion points within the three White Oak Bayou diversion reaches; and

WHEREAS, the City also seeks to add agricultural purpose of use to the authorized water; and

WHEREAS, the maximum diversion amounts requested in the application incorporate a channel loss factor of 5%; and

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

WHEREAS, the Executive Director recommends that special conditions be included in the amendment to clarify the applicability of the existing streamflow restrictions in the Permit, as amended; and

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

NOW, THEREFORE, this amendment to Water Use Permit No. 5827, designated Water Use Permit No. 5827B, is issued to the City of Houston subject to the following terms and conditions:

#### 1. USE

In addition to previous authorizations, Permittee is authorized to divert and use not to exceed a total of 308,708 acre-feet per year of the 580,923 acre-feet of return flows originating from groundwater, interbasin transfer of surface water, and San Jacinto River Basin water rights per year, currently authorized to be reused under Water Use Permit No. 5827, from 23 diversion reaches on Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou, San Jacinto River Basin, for municipal, industrial, and agricultural purposes in the following cumulative amounts:

- A. From Brays Bayou Diversion Reaches 1-3: 129,450 acre-feet per year.
- B. From Greens Bayou Diversion Reaches 1-10: 42,194 acre-feet per year.
- C. From Hunting Bayou Diversion Reach 1: 4,257 acre-feet per year.
- D. From Sims Bayou Diversion Reaches 1-6: 108,336 acre-feet per year.
- E. From White Oak Bayou Diversion Reaches 1-3: 24,471 acre-feet per year.
- F. Permittee's maximum combined diversion amount from all diversion points within the 23 diversion reaches shall not exceed 308,708 acre-feet per year.

#### 2. DIVERSION

- A. In addition to previous authorizations, Permittee is authorized to divert from 23 diversion reaches on Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou described as follows:
  - 1. Brays Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.705665° N, Longitude 95.567322° W and a downstream limit located at Latitude 29.673353° N, Longitude 95.530046° W.
  - 2. Brays Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.673353° N, Longitude 95.530046° W and a downstream limit located at Latitude 29.687362° N, Longitude 95.44712° W.

- 3. Brays Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.687362° N, Longitude 95.44712° W and a downstream limit located at Latitude 29.726929° N, Longitude 95.278374° W.
- 4. Greens Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.95056° N, Longitude 95.530155° W and a downstream limit located at Latitude 29.945387° N, Longitude 95.435543° W.
- 5. Greens Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.954387° N, Longitude 95.435543° W and a downstream limit located at Latitude 29.94831° N, Longitude 95.401137° W.
- 6. Greens Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.94831° N, Longitude 95.401137° W and a downstream limit located at Latitude 29.945203° N, Longitude 95.390248° W.
- 7. Greens Bayou Diversion Reach 4 with an upstream limit located at Latitude 29.945203° N, Longitude 95.390248° W and a downstream limit located at Latitude 29.939868° N, Longitude 95.34974° W.
- 8. Greens Bayou Diversion Reach 5 with an upstream limit located at Latitude 29.939868° N, Longitude 95.34974° W and a downstream limit located at Latitude 29.914375° N, Longitude 95.291469° W.
- 9. Greens Bayou Diversion Reach 6 with an upstream limit located at Latitude 29.914375° N, Longitude 95.291469° W and a downstream limit located at Latitude 29.916016° N, Longitude 95.27753° W.
- 10. Greens Bayou Diversion Reach 7 with an upstream limit located at Latitude 29.916016° N, Longitude 95.27753° W and a downstream limit located at Latitude 29.848467° N, Longitude 95.228474° W.
- 11. Greens Bayou Diversion Reach 8 with an upstream limit located at Latitude 29.848467° N, Longitude 95.228474° W and a downstream limit located at Latitude 29.83794° N, Longitude 95.234137° W.
- 12. Greens Bayou Diversion Reach 9 with an upstream limit located at Latitude 29.83794° N, Longitude 95.234137° W and a downstream limit located at Latitude 29.781663° N, Longitude 95.213298° W.
- 13. Greens Bayou Diversion Reach 10 with an upstream limit located at Latitude 29.781663° N, Longitude 95.213298° W and a downstream limit located at Latitude 29.750005° N, Longitude 95.166909° W.
- 14. Hunting Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.806304° N, Longitude 95.294696° W and a downstream limit located at Latitude 29.737557° N, Longitude 95.212222° W.
- 15. Sims Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.604109° N, Longitude 95.476793° W and a downstream limit located at Latitude 29.628948° N, Longitude 95.404922° W.
- 16. Sims Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.628948° N, Longitude 95.404922° W and a downstream limit located at Latitude 29.644279° N, Longitude 95.337742° W.

- 17. Sims Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.644279° N, Longitude 95.337742° W and a downstream limit located at Latitude 29.691627° N, Longitude 95.256988° W.
- 18. Sims Bayou Diversion Reach 4 with an upstream limit located at Latitude 29.691627° N, Longitude 95.256988° W and a downstream limit located at Latitude 29.702787° N, Longitude 95.265699° W.
- 19. Sims Bayou Diversion Reach 5 with an upstream limit located at Latitude 29.702787° N, Longitude 95.265699° W and a downstream limit located at Latitude 29.708652° N, Longitude 95.256605° W.
- 20. Sims Bayou Diversion Reach 6 with an upstream limit located at Latitude 29.708652° N, Longitude 95.256605° W and a downstream limit located at Latitude 29.71778° N, Longitude 95.241957° W.
- 21. White Oak Bayou Diversion Reach 1 with an upstream limit located at Latitude 29.876578° N, Longitude 95.496077° W and a downstream limit located at Latitude 29.844779° N, Longitude 95.460177° W.
- 22. White Oak Bayou Diversion Reach 2 with an upstream limit located at Latitude 29.844779° N, Longitude 95.460177° W and a downstream limit located at Latitude 29.824956° N, Longitude 95.456004° W.
- 23. White Oak Bayou Diversion Reach 3 with an upstream limit located at Latitude 29.824956° N, Longitude 95.456004° W and a downstream limit located at Latitude 29.765446° N, Longitude 95.358471° W.

#### B. Diversion Rates:

- 1. A combined maximum diversion rate of 188.2 cfs (84,472 gpm) for all diversion points located within Brays Bayou Diversion Reaches 1-3.
- 2. A combined maximum diversion rate of 64.4 cfs (28,922 gpm) for all diversion points located within Greens Bayou Diversion Reaches 1-10.
- 3. A combined maximum diversion rate of 6.2 cfs (2,778 gpm) for all diversion points located within Hunting Bayou Diversion Reach 1.
- 4. A combined maximum diversion rate of 199.3 cfs (89,441 gpm) for all diversion points located within Sims Bayou Diversion Reaches 1-6.
- 5. A combined maximum diversion rate of 35.6 cfs (15,969 gpm) for all diversion points located within White Oak Bayou Diversion Reaches 1-3.

#### 3. CONSERVATION

Permittee shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into on or after the effective date of this permit, including any contract extension or renewal, that each successive wholesale

customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

#### 4. SPECIAL CONDITIONS

- A. Ninety days prior to the diversion of water for agricultural use, Permittee or contract customer shall submit a water conservation plan to the TCEQ that meets the requirements of 30 Texas Administrative Code §288.4.
- B. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens on any new diversion structure(s).
- C. In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reaches 1 and 2, shall be limited to times when streamflow immediately downstream of the measurement point at Southwest Wastewater Treatment Plant equals or exceeds the following values.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
38.74	38.20	48.96	50.58	53.80	53.80	53.80	54.88	57.88	34.26	35.15	35.87

cfs = cubic feet per second

D. In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reach 3, shall be limited to times when streamflow immediately downstream of the measurement point at McGregor Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

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54.49 53.73	68.87	71.14	75.68	75.68	75.68	77.19	77.19	48.18	49.44	50.45

cfs = cubic feet per second

E. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 1 through 8, shall be limited to times when streamflow immediately downstream of the measurement point at Brock Park equals or exceeds the following values.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36.54	37.98	50.52	45.14	46.22	48.37	41.92	40.84	41.92	30.53	30.53	33.68
C											

cfs = cubic feet per second

F. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 9 and 10, shall be limited to times when streamflow immediately downstream of the measurement point at Northeast Wastewater Treatment Plant equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
41.17	42.78	56.91	50.85	52.07	54.49	47.22	46.01	47.22	34.39	34.39	37.94

cfs = cubic feet per second

G. In order to provide sufficient flow for instream uses of Hunting Bayou, diversions from Reach 1, shall be limited to times when streamflow immediately downstream of the measurement point at Herman Brown Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4.97	4.97	6.41	5.44	5.59	5.81	5.14	4.40	4.99	3.53	3.53	4.17

cfs = cubic feet per second

H. In order to provide sufficient flow for instream uses of Sims Bayou, diversions from Reaches 1 through 6, shall be limited to times when streamflow immediately downstream of the measurement point at Reveille Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20.00	20.00	22.46	20.00	22.46	22.46	20.58	20.58	22.46	20.00	20.00	20.00

cfs = cubic feet per second

I. In order to provide sufficient flow for instream uses of White Oak Bayou, diversions from Reaches 1 through 3, shall be limited to times when streamflow immediately downstream of the measurement point at Stude Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26.86	26.86	30.60	26.86	26.86	28.80	27.00	27.00	26.86	26.86	26.86	26.86

cfs = cubic feet per second

- J. Permittee shall only divert and use return flows pursuant to Paragraph 1. USE and Paragraph 2. DIVERSION in accordance with the most recently approved accounting plan. Permittee shall maintain the plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the accounting plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittee fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittee shall immediately cease diversion of discharged return flows, and either apply to amend the permit, or voluntarily forfeit the permit. If Permittee fails to amend the accounting plan or forfeit the permit, the Commission may begin proceedings to cancel the permit. Permittee shall immediately notify the Executive Director upon modification of the accounting plan and provide copies of the appropriate documents effectuating such changes.
- K. Permittee shall install and maintain a measuring device which accounts for, within 5% accuracy, the quantity of water diverted from the reaches authorized above in Paragraph 2. DIVERSION and maintain measurement records.
- L. Permittee shall allow representatives of the Texas Commission on Environmental Quality reasonable access to inspect any measuring devices and records.

This amendment is issued subject to all terms, conditions, and provisions contained in Water Use Permit No. 5827, as amended, except as specifically amended herein.

This amendment is issued subject to all superior and senior water rights in the San Jacinto River Basin.

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

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

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

	For the Commission	
Date Issued:		

# **Texas Commission on Environmental Quality**

#### INTEROFFICE MEMORANDUM

To: Hal Bailey, Project Manager Date: April 28, 2025

Water Rights Permitting Team

Through: Kathy Alexander, Ph.D., Policy and Technical Analyst Water Availability Division

Trent Gay, Team Leader Surface Water Availability Team

From: Andrew Garcia, Hydrologist

Surface Water Availability Team

Subject: City of Houston

WRPERM 5827 CN600128995

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, White Oak Bayou, and Houston Ship Channel

San Jacinto River Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

#### **HYDROLOGY REVIEW**

# **Application Summary**

Water Use Permit No. 5827 (Permit) authorizes the City of Houston (City) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The Permit also includes an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

The City requests to amend the Permit to add three diversion reaches on Brays Bayou to divert 129,450 acre-feet per year, at a maximum combined diversion rate of 188 cfs (84,472 gpm); to add ten diversion reaches on Greens Bayou to divert 42,194 acre-feet per year, at a maximum combined diversion rate of 61.3 cfs (27,533 gpm); to add one diversion reach on Hunting Bayou to divert

City of Houston, WRPERM 5827
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin
Page 2 of 3

4,257 acre-feet per year, at a maximum diversion rate of 6.19 cfs (2,778 gpm); to add six diversions reaches on Sims Bayou to divert 108,336 acre-feet per year, at a maximum combined diversion rate of 158 cfs (70,694 gpm); and to add 3 diversion reaches on White Oak Bayou to divert 24,471 acre-feet per year, at a maximum combined diversion rate of 35.6 cfs (15,969 gpm).

The City also requests to amend the Permit to add agricultural purpose of use.

The application was declared administratively complete on August 25, 2022.

### **Hydrology Review**

Resource Protection Staff did not recommend new instream flow requirements for this application; however, they did clarify how the existing streamflow restrictions would apply to the amendment. See Resource Protection staff's March 31, 2025 memorandum.

The application does not request a new appropriation of water; therefore, a water availability analysis is not necessary. However, the application must be reviewed to ensure no water rights are affected by the request.

In evaluating whether adding three diversion reaches on Brays Bayou, ten diversion reaches on Greens Bayou, one diversion reach on Hunting Bayou, six diversion reaches on Sims Bayou, and three diversion reaches on White Oak Bayou would affect senior water rights, staff notes that no water rights can be affected because the conveyance of return flows is already authorized, and the application does not request an increase in the authorized diversion rate or amount of water to be diverted. In addition, the request to add multiple diversion reaches will be more protective of other water rights because the diversion rates in each reach will be limited to the amounts and rates of return flows discharged directly upstream of each diversion reach.

#### Conclusion

Staff can support granting the application provided the following special conditions are included in the amendment:

1. Permittee shall only divert and use return flows pursuant to Paragraph 1. USE and Paragraph 2. DIVERSION in accordance with the most recently approved accounting plan. Permittee shall maintain the plan in electronic format and make the data available to the Executive Director and the public upon request. Any modifications to the accounting plan shall be approved by the Executive Director. Any modification to the accounting plan that changes the permit terms must be in the form of an amendment to the permit. Should Permittee fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittee shall immediately cease diversion of discharged return flows, and either apply to amend the permit, or voluntarily forfeit the permit. If Permittee fails to amend the accounting

City of Houston, WRPERM 5827 Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 3 of 3

plan or forfeit the permit, the Commission may begin proceedings to cancel the permit. Permittee shall immediately notify the Executive Director upon modification of the accounting plan and provide copies of the appropriate documents effectuating such changes.

Andrew Garcia
Andrew Garcia, Hydrologist

# **Texas Commission on Environmental Quality**

#### INTEROFFICE MEMORANDUM

**To:** Lillian Beerman, Project Manager **Date:** March 31, 2025

Water Rights Permitting Team

Through: Leslie Patterson, Team Leader

Resource Protection Team

**From:** George Gable, Aquatic Scientist

**Resource Protection Team** 

**Subject:** City of Houston

WRPERM 5827 CN600128995

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, White Oak Bayou, and Houston Ship Channel

San Jacinto River Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

Environmental reviews of water right applications are conducted in accordance with applicable provisions of the Texas Water Code (TWC) and the administrative rules of the Texas Commission on Environmental Quality (TCEQ). The provisions applicable to environmental reviews can vary according to the type and the location of the authorization requested.

### **APPLICATION SUMMARY**

Water Use Permit No.5827 (Permit) authorizes the City of Houston (City) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The Permit also includes an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

City of Houston, 5827C Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 2 of 9

The City requests to amend the Permit to add three diversion reaches on Brays Bayou to divert 129,450 acre-feet per year, at a maximum combined diversion rate of 188 cfs (84,472 gpm); to add ten diversion reaches on Greens Bayou to divert 42,194 acre-feet per year, at a maximum combined diversion rate of 61.3 cfs (27,533 gpm); to add one diversion reach on Hunting Bayou to divert 4,257 acre-feet per year, at a maximum diversion rate of 6.19 cfs (2,778 gpm); to add six diversions reaches on Sims Bayou to divert 108,336 acre-feet per year, at a maximum combined diversion rate of 158 cfs (70,694 gpm); and to add 3 diversion reaches on White Oak Bayou to divert 24,471 acre-feet per year, at a maximum combined diversion rate of 35.6 cfs (15,969 gpm).

The City also requests to amend the Permit to add agricultural purpose of use.

### **ENVIRONMENTAL ANALYSIS**

**Aquatic and Riparian Habitats:** The upper portions of Brays, Greens, Hunting, Sims, and White Oak Bayous are perennial, and the lower portions are tidally influenced. The upper portions of Buffalo Bayou are perennial, and the lower portions are tidally influenced. The Houston Ship channel is tidally influenced. Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, Buffalo Bayou, and the Houston Ship Channel are located in the Northern Humid Gulf Coastal Prairies ecoregion (Griffith et. al. 2007).

The checklist for the San Jacinto River Basin identified 112 species of ichthyofauna occurring within Buffalo – San Jacinto hydrologic unit (United States Geologic Survey code 12040104) (Hendrickson and Cohen 2022). The saltmarsh topminnow (Fundulus jenkinsi), Louisiana pigtoe (Pleurobema riddellii), sandbank pocketbook (Lampsilis satura), Brazos heelsplitter (Potamilus streckersoni), Texas fawnsfoot (Truncilla macrodon), Texas diamondback terrapin (Malaclemys terrapin littoralis), and alligator snapping turtle (Macrochelys temminckii), high-interest aquatic and aquatic dependent species, have been determined to occur in Harris and Fort Bend counties (TPWD 2024). This amendment is not expected to have an effect on any high-interest aquatic or aquatic-dependent species, because no additional state water will be taken and no increase in diversion rate or amount is being requested.

The City has agreed to install screens on any new diversion structures in order to minimize entrainment and impingement of aquatic organisms. The City's request is not expected to adversely impact aquatic and riparian habitats in the area.

On April 20, 2011, the TCEQ adopted environmental flow standards for the Trinity and San Jacinto Rivers, and Galveston Bay (Title 30 Texas Administrative Code (TAC) Chapter 298 Subchapter B). These environmental flow standards are considered adequate to support a sound ecological environment (Title 30 TAC § 298.210). The City does not request a new appropriation of water or an

City of Houston, 5827C

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 3 of 9

amendment that increases the amount of water stored, taken, or diverted. Resource Protection staff recommend streamflow restrictions for the addition of 23 diversion reaches, utilizing the existing streamflow restrictions and measurement points in the Permit.

Diversion of water from Reaches 1 and 2 on Brays Bayou upstream of the measurement point at Southwest Wastewater Treatment Plant is limited to comply with the streamflow requirements listed in Table 1.

Table 1. Recommended Monthly Flow Values (cfs) for Brays Bayou at Southwest Wastewater Treatment Plant.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
38.74	38.20	48.96	50.58	53.80	53.80	53.80	54.88	54.88	34.26	35.15	35.87

cfs = cubic feet per second

Diversion of water from Reach 3 on Brays Bayou upstream and downstream of the measurement point at McGregor Park is limited to comply with the streamflow requirements listed in Table 2. For diversions of water downstream of the measurement point, the City shall not divert water unless streamflow exceeds the streamflow requirements in Table 2 plus the diversion rate at the time of diversion.

Table 2. Recommended Monthly Flow Values (cfs) for Brays Bayou at McGregor Park.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
54.49	53.73	68.87	71.14	75.68	75.68	75.68	77.19	77.19	48.18	49.44	50.45

cfs = cubic feet per second

Diversion of water from Reaches 1 through 8 on Greens Bayou upstream of the measurement point at Brock Park is limited to comply with the streamflow requirements listed in Table 3.

Table 3. Recommended Monthly Flow Values (cfs) for Greens Bayou at Brock Park.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36.54	37.98	50.52	45.14	46.22	48.37	41.92	40.84	41.92	30.53	30.53	33.68

cfs = cubic feet per second

Diversion of water from Reaches 9 and 10, on Greens Bayou, upstream and downstream of the measurement point at the Northeast Wastewater Treatment Plant is limited to comply with the streamflow requirements listed in Table 4. For diversions of water downstream of the measurement point, the City shall not divert water unless streamflow exceeds the streamflow requirements in Table 4 plus the diversion rate at the time of diversion.

City of Houston, 5827C

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 4 of 9

Table 4. Recommended Monthly Flow Values (cfs) for Greens Bayou at Northeast Wastewater Treatment Plant.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
41.17	42.78	56.91	50.85	52.07	54.49	47.22	46.01	47.22	34.39	34.39	37.94

cfs = cubic feet per second

Diversion of water from Reach 1 on Hunting Bayou upstream and downstream of the measurement point at Herman Brown Park is limited to the streamflow requirements listed in Table 5. For diversions of water downstream of the measurement point, the City shall not divert water unless streamflow exceeds the streamflow requirements in Table 5 plus the diversion rate at the time of diversion.

Table 5. Recommended Monthly Flow Values (cfs) for Hunting Bayou at Herman Brown Park.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4.97	4.97	6.41	5.44	5.59	5.81	5.14	4.40	4.99	3.53	3.53	4.17

cfs = cubic feet per second

Diversion of water from Reaches 1 through 6 on Sims Bayou upstream and downstream of the measurement point at the Reveille Park is limited to comply with the streamflow requirements listed in Table 6. For diversions of water downstream of the measurement point, the City shall not divert water unless streamflow exceeds the streamflow requirements in Table 6 plus the diversion rate at the time of diversion.

Table 6. Recommended Monthly Flow Values (cfs) for Sims Bayou at Reveille Park.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20.00	20.00	22.46	20.00	22.46	22.46	20.58	20.58	22.46	20.00	20.00	20.00

cfs = cubic feet per second

Diversion of water from Reaches 1 through 3 on Whiteoak Bayou upstream and downstream of the measurement point at Stude Park Plant is limited to comply with the streamflow requirements listed in Table 7. For diversions of water downstream of the measurement point, the City shall not divert water unless streamflow exceeds the streamflow requirements in Table 7 plus the diversion rate at the time of diversion.

Table 7. Recommended Monthly Flow Values (cfs) for Whiteoak Bayou at Stude Park.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26.86	26.86	30.60	26.86	26.86	28.80	27.00	27.00	26.86	26.86	26.86	26.86

cfs = cubic feet per second

City of Houston, 5827C Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 5 of 9

Staff recommend that diversion of water under this proposed amendment should be limited to comply with the applicable monthly flow values.

**Recreational Uses:** Brays Bayou, Hunting Bayou, and Sims Bayou have a presumed primary contact 1 recreation use. Greens Bayou (Segment 1016), Whiteoak Bayou (Segment 1017), and Buffalo Bayou (Segment 1013) have a designated primary contact recreation 1 use (TCEQ 2022). The City's request should not adversely impact recreational uses.

Water Quality: According to Appendix D of the Texas Surface Water Quality Standards, Brays Bayou is perennial from 11.5 km upstream from the confluence with the Houston Ship Channel upstream to SH 6 and has a designated limited aquatic life use. Hunting Bayou has a presumed high aquatic life use. Greens Bayou (Segment 1016) and Whiteoak Bayou (Segment 1017) have a designated limited aquatic life use. According to Appendix D of the Texas Surface Water Quality Standards, Sims Bayou 11.0 km upstream of the confluence with the Houston Ship Channel upstream to Hiram Clark Drive has a designated limited aquatic life use. The Houston Ship Channel (Segment 1006) has a designated navigation and industrial water supply use. Buffalo Bayou (Segment 1013) has a designated intermediate aquatic life use (TCEQ 2022).

Brays Bayou (Assessment Unit 1007B 01) is identified in the *Texas Integrated Report* as non-supporting for *E. coli* and with concern for screening levels of total phosphorous, nitrate, and ammonia. A portion of the Houston Ship Channel (Assessment Unit 1007 04) is identified in the *Texas Integrated Report* as non-supporting for polychlorinated biphenyls and dioxin in edible fish tissue and with concern for screening levels of total phosphorous, nitrate, and ammonia (TCEQ 2024).

Portions of Greens Bayou (Assessment Units 1016 01, 1016 02, and 1016 03) are identified in the *Texas Integrated Report* as non-supporting for *E. coli* and with concern for screening levels of total phosphorous and nitrate. Assessment Unit 1016 02 is also listed in the *Texas Integrated Report* with concern for screening levels of ammonia. A portion of the Houston Ship Channel (Assessment Unit 1006 03) is identified in the *Texas Integrated Report* as non-supporting for polychlorinated biphenyls and dioxin in edible fish tissue and with concern for screening levels of total phosphorous, nitrate, polychlorinated biphenyls dichlorodiphenyltrichloroethane, and dichlorodiphenyldichloroethane (TCEQ 2024). Hunting Bayou, Assessment Unit 1007R 03, is identified in the *Texas Integrated Report* as non-supporting for *E. Coli* and with concern for screening levels of dissolved oxygen and nitrate. Assessment Unit 1007R 04, in Hunting Bayou is identified in the *Texas Integrated Report* as not supporting for *E. Coli* and dissolved oxygen and with concern for screening levels of nitrate (TCEQ 2024).

Portions of Sims Bayou (Assessment Units 1007A 01, 1007D 01, 1007D 02, and 1007D 03) are identified in the *Texas Integrated Report* as non-supporting for *E. Coli* and with concern for screening levels of total phosphorous and nitrate. A portion of the Houston Ship Channel (Assessment Unit 1007 02) is identified in the *Texas Integrated Report* as non-supporting for polychlorinated biphenyls and dioxin in edible fish tissue and with concern for screening levels of total phosphorous and nitrate (TCEQ 2024).

Portions of Whiteoak Bayou (Assessment Units 1017 01, 1017 02, 1017 03, and 1017 04) are identified in the *Texas Integrated Report* as non-supporting for *E. Coli* and with concern for screening levels for total phosphorous and nitrate. A portion of Buffalo Bayou, Assessment Unit 1013 01, is identified in the *Texas Integrated Report* as non-supporting for *E. Coli* and with concern for screening levels for total phosphorous and nitrate (TCEQ 2024). The City's request should not adversely impact water quality.

**Freshwater Inflows:** Freshwater inflows are critical for maintaining the historical productivity of bays and estuaries along the Gulf Coast. The City does not request a new appropriation of water. Therefore, the City's request should not have any impact to Galveston Bay.

#### **RECOMMENDATIONS**

Resource Protection staff recommend the following Special Conditions be included in the proposed amendment, if granted:

- 1. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens on any new diversion structure(s).
- In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reaches 1 and 2, shall be limited to times when streamflow immediately downstream of the measurement point at Southwest Wastewater Treatment Plant equals or exceeds the following values.

Ī	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	38.74	38.20	48.96	50.58	53.80	53.80	53.80	54.88	54.88	34.26	35.15	35.87

cfs = cubic feet per second

3. In order to provide sufficient flow for instream uses of Brays Bayou, diversions from Reach 3, shall be limited to times when streamflow immediately downstream of the measurement point at McGregor Park equals or exceeds the following values. For diversions of water downstream of the

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin
Page 7 of 9

measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
54.49	53.73	68.87	71.14	75.68	75.68	75.68	77.19	77.19	48.18	49.44	50.45

cfs = cubic feet per second

4. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 1 through 8, shall be limited to times when streamflow immediately downstream of the measurement point at Brock Park equals or exceeds the following values.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36.54	37.98	50.52	45.14	46.22	48.37	41.92	40.84	41.92	30.53	30.53	33.68

cfs = cubic feet per second

5. In order to provide sufficient flow for instream uses of Greens Bayou, diversions from Reaches 9 and 10, shall be limited to times when streamflow immediately downstream of the measurement point at Northeast Wastewater Treatment Plant equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
41.17	42.78	56.91	50.85	52.07	54.49	47.22	46.01	47.22	34.39	34.39	37.94

cfs = cubic feet per second

6. In order to provide sufficient flow for instream uses of Hunting Bayou, diversions from Reach 1, shall be limited to times when streamflow immediately downstream of the measurement point at Herman Brown Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ī	4.97	4.97	6.41	5.44	5.59	5.81	5.14	4.40	4.99	3.53	3.53	4.17

cfs = cubic feet per second

7. In order to provide sufficient flow for instream uses of Sims Bayou, diversions from Reaches 1 though 6, shall be limited to times when

City of Houston, 5827C

Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin
Page 8 of 9

streamflow immediately downstream of the measurement point at Reveille Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ī	20.00	20.00	22.46	20.00	22.46	22.46	20.58	20.58	22.46	20.00	20.00	20.00

cfs = cubic feet per second

8. In order to provide sufficient flow for instream uses of Whiteoak Bayou, diversions from Reaches 1 through 3, shall be limited to times when streamflow immediately downstream of the measurement point at Stude Park equals or exceeds the following values. For diversions of water downstream of the measurement point, the Permittee shall not divert water unless streamflow exceeds the streamflow requirements plus the diversion rate at the time of diversion.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26.86	26.86	30.60	26.86	26.86	28.80	27.00	27.00	26.86	26.86	26.86	26.86

cfs = cubic feet per second

#### LITERATURE CITED

Griffith GE, Bryce SA, Omernik JM, Rogers AC. 2007. Ecoregions of Texas - Project Report to Texas Commission on Environmental Quality. Reston (VA): U.S. Geological Survey. Report No.: AS-199. 125p.

Hendrickson, Dean A., & Cohen, Adam E. (2022). Fishes of Texas Project Database (version 3.00). Texas Advanced Computing Center, University of Texas at Austin. <a href="http://doi.org/10.17603/C3WC70">http://doi.org/10.17603/C3WC70</a>. Accessed (cited 2025 March 27) FoTX - Home Fishes of Texas Project, The University of Texas at Austin.

TCEQ. 2022. Texas Surface Water Quality Standards §§307.1-307.10. Austin (TX): Texas Commission on Environmental Quality.

TCEQ. 2024. Texas Integrated Report of Surface Water Quality. Austin (TX): Texas Commission on Environmental Quality.

TPWD. 2024. Texas Parks and Wildlife Department, Wildlife Division, Diversity and Habitat Programs. TPWD County Lists of Protected Species and Species of Greatest Conservation Need [Internet]. Austin (TX): Harris and Fort Bend counties, revised

City of Houston, 5827C Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, White Oak Bayou, and Houston Ship Channel, San Jacinto River Basin Page 9 of 9

January 15, 2025. [cited 2025 March 27]. Available from http://tpwd.texas.gov/gis/rtest/.

George M Goals AV
George Gable, Aquatic Scientist

# **Texas Commission on Environmental Quality**

### INTEROFFICE MEMORANDUM

**To:** Lilian Beerman, Project Manager **Date:** March 27, 2025

Water Rights Permitting Team

Through: Leslie Patterson, Team Leader

Resource Protection Team

**From:** Richard Schmoyer, Aquatic Scientist

Resource Protection Team

**Subject:** City of Houston

WRPERM 5827 CN600128995

Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White

Oak Bayou, San Jacinto River Basin

Harris, Fort Bend, Brazoria, Chambers, and Galveston counties

#### **APPLICATION SUMMARY**

Water Use Permit No. 5827 (Permit) authorizes the City of Houston (City) to use the bed and banks of Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou, in the San Jacinto River Basin, to convey 580,923 acre-feet per year of groundwater and surface water-based return flows, for subsequent diversion and use from 14 points on Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Lake Houston, Sims Bayou, and Whiteoak Bayou and three diversion reaches on Buffalo Bayou for municipal and industrial purposes within the City's service area in Harris, Fort Bend, Brazoria, Chambers, and Galveston counties.

The Permit also includes an exempt interbasin transfer to portions of Harris, Fort Bend, Brazoria, Chambers, and Galveston counties within the Trinity River Basin, San Jacinto-Brazos Coastal Basin, and Trinity-San Jacinto Coastal Basin for municipal and industrial purposes within the City's service area.

The City requests to amend the Permit to add three diversion reaches on Brays Bayou to divert 129,450 acre-feet per year, at a maximum combined diversion rate of 188 cfs (84,472 gpm); to add ten diversion reaches on Greens Bayou to divert 42,194 acre-feet per year, at a maximum combined diversion rate of 61.3 cfs (27,533 gpm); to add one diversion reach on Hunting Bayou to divert 4,257 acre-feet per year, at a maximum diversion rate of 6.19 cfs (2,778 gpm); to add six diversions reaches on Sims Bayou to divert 108,336 acre-feet per year, at a maximum combined diversion rate of 158 cfs (70,694 gpm); and to add 3 diversion reaches on White Oak Bayou to divert 24,471 acre-feet per year, at a maximum combined diversion rate of 35.6 cfs (15,969 gpm).

The City also requests to amend the Permit to add agricultural purpose of use.

City of Houston, 5827B
Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou, San
Jacinto River Basin
Page 2 of 3

#### **WATER CONSERVATION REVIEW**

Pursuant to Title 30 Texas Administrative Code (TAC) §295.9(4), an application requesting to change the purpose of use requires the submittal of a water conservation.

The City is adding agricultural use for the authorized water. However, the City has stated that the requested agricultural use will be for the use of water to irrigate golf courses, park land, or other green spaces within the City's service area. These fall under the definition of "municipal use" pursuant to 30 TAC §297.1(34), therefore, no water will currently be diverted for agricultural use. In the event the City uses water for any agricultural uses, a water conservation plan for agricultural use, which complies with 30 TAC Chapter 288, shall be submitted for TCEQ review prior to the diversion of water for this use.

The application is consistent with the 2021 Region H Water Plan and the 2022 State Water Plan because there is nothing in the water plans that conflicts with issuing this permit.

#### **RECOMMENDATIONS**

The following water conservation language should be included in the permit, if granted:

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

Resource Protection Staff recommend the following special condition be included in the permit, if granted:

Ninety days prior to the diversion of water for agricultural use, Permittee or contract customer shall submit a water conservation plan to the TCEQ that meets the requirements of 30 TAC §288.4.

City of Houston, 5827B Brays Bayou, Greens Bayou, Hunting Bayou, Sims Bayou, and White Oak Bayou, San Jacinto River Basin Page 3 of 3

Richard Schmoyer
Richard Schmoyer, Aquatic Scientist

# **Hal Bailey**

From: Michael Pinckney

**Sent:** Tuesday, April 29, 2025 11:01 AM

To: Hal Bailey

**Subject:** RE: City of Houston Mailing Address

That is correct, our offices moved about a year ago.

### Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

/ <u>carollo.com</u>



\*Professional registration in Texas

From: Hal Bailey <Hal.Bailey@tceq.texas.gov>

Sent: Tuesday, April 29, 2025 10:59 AM

To: Michael Pinckney
Subject: RE: City of Houston Mailing Address

**CAUTION:** This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Mr. Pinckney,

Thank you for the information. So, your mailing address on Capital of Texas Highway that you provided to Lillian Beerman is no longer valid?

The draft documents will be sent to you via email. At this time, only items required to be sent certified are physically mailed out.

Thank you,

Hal E. Bailey, Jr.

Natural Resources Specialist IV

Water Rights Permitting Team

Water Rights Permitting and Availability Section

Phone: 512-239-4615

From: Michael Pinckney <

Sent: Tuesday, April 29, 2025 10:48 AM
To: Hal Bailey < Hal.Bailey@tceq.texas.gov >
Subject: RE: City of Houston Mailing Address

For the City of Houston, 611 Walker St, Houston Texas.

My office address is 10900 Stonelake Blvd. Bldg. 2, Suite 126, Austin TX 78759, but I work remotely from another city so email is more effective for me.

### Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

/ carollo.com



\*Professional registration in Texas

From: Hal Bailey < Hal.Bailey@tceq.texas.gov > Sent: Tuesday, April 29, 2025 10:36 AM

To: Michael Pinckney <

**Subject:** City of Houston Mailing Address

**CAUTION:** This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Good morning Mr. Pinckney,

Water Use Permit amendment application nos. 5827B and 5826A for the City of Houston have been reassigned to me. Can you please provide the City's mailing address?

The drafts will be sent to you for review and approval, but I need the applicant's mailing address to include in the draft permit and notice.

Thank you for your assistance.

Sincerely,

Hal E. Bailey, Jr.
Natural Resources Specialist IV
Water Rights Permitting Team
Water Rights Permitting and Availability Section

Phone: 512-239-4615

# City\_of\_Houston\_5826A & 5827B\_Application\_Amendments

# Lillian Beerman <Lillian.Beerman@Tceq.Texas.Gov>

Thu 8/22/2024 10:46 AM

To:MPinckney@carollo.com · Cc:Lillian Beerman <Lillian.Beerman@Tceq.Texas.Gov>

2 attachments (1 MB)

City\_of\_Houston\_5826A\_Application\_Amendment\_12.1.2022.pdf; City\_of\_Houston\_5827B\_Amend\_Application\_12\_01\_2022.pdf;

Mr. Pinckney,

Attached are your emails for amendment.

If you have any questions or concerns, do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D. Water Rights Permitting Team Water Availability Division 512-239-4019 Iillian.beerman@tceq.texas.gov Re: City\_of\_Houston\_5827B\_Technical\_RFI\_Extension\_Ltr

Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Fri 3/10/2023 6:18 PM

To: Michael Pinckney <

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Thank You Mr. Pinckney.

I will forward your response to Section.

Have a Good Weekend.

Lillian E. Beerman, Ph.D.
Water Rights Permitting Team
Water Availability Division
512-239-4019
lillian.beerman@tceq.texas.gov

From: Michael Pinckney <

Sent: Friday, March 10, 2023 4:07 PM

To: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Cc: Fitos, Ekaterina - HPW < Ekaterina. Fitos@houstontx.gov>; Tripathi, Satish - HPW

; David Harkins

Subject: RE: City\_of\_Houston\_5827B\_Technical\_RFI\_Extension\_Ltr

Dr. Beerman,

Please find the attached RFI response letter for Application No. 5827B to amend WRPERM No. 5827. Thank you.

#### Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

carollo.com



\*Professional registration in Texas

From: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov >

Sent: Friday, February 24, 2023 12:07 PM

To: Michael Pinckney

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov >

Subject: City\_of\_Houston\_5827B\_Technical\_RFI\_Extension\_Ltr

**CAUTION:** This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Mr. Pinckney,

An extension has been granted for your response to the Technical RFI for the City of Houston's Application No. 5827B to amend WRPERM No. 5827.

The new due date is March 24, 2023.

The extension letter is attached.

If you have any questions or concerns, please do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D.
Water Rights Permitting Team
Water Availability Division
512-239-4019
lillian.beerman@tceq.texas.gov







March 10, 2023

Lillian E. Beerman, Ph.D.
Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
12100 Park 35 Circle
Building F, Room 3101
Austin, Texas 78753
Lillian.Beerman@tceq.texas.gov

Subject: RFI Response on Water Right Amendment Application No. 5827B, by the City of Houston

Dear Dr. Beerman:

This letter is in response to the technical review Request for Information ("RFI") received from TCEQ staff, under your signature, dated January 23, 2023, regarding the above referenced permit amendment application by the City of Houston ("Houston"), and for which you have extended Houston's response deadline to March 24th. The nature of the Amendment No. 5827B sought by Houston is to have authorized a series of diversion reaches along the various bayous for which Houston already has appropriated return flows under its Permit No. 5827. Houston has amended this pending application also to seek authorization to use these diverted return flows for agricultural use, in addition to the municipal and industrial uses already authorized.

In the January 23rd RFI you have indicated that, if Houston does not intend to divert water for agricultural purposes or has not identified a contract customer for such water use, as an alternative to now submitting a completed Water Conservation Plan ("WCP") for agricultural use compliant with TCEQ Rule 288.4 Houston can instead accept a special condition included in the amendment requiring that such a WCP be submitted prior to diversion of water for agricultural use.

Consistent with its overall purpose of this Amendment No. 5827B to maximize Houston's flexibility for use of this water supply, when Houston next submits its five-year Water Conservation Plan (due in 2024), that new plan will also encompass agricultural use compliant with TCEQ Rule 288.4. For the time being, however, the irrigation uses made by Houston and its water supply contract customers under its Water Use Permit No. 5827, as amended, fall within TCEQ's definition of "municipal use" applicable for water rights permitting and WCP purposes. 30 TEX. ADMIN. CODE §§ 297.1(34), 288.1(12). For this reason, Houston prefers the stated alternative approach of including an appropriate special condition in TCEQ staff's proposed draft of Amendment No. 5827B, designed to be satisfied upon Houston's submission of a WCP encompassing agricultural use under the requirements of Rule 288.4.

Lillian E. Beerman, Ph.D.
Project Manager
Water Rights Permitting Team
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
March 10, 2023

Page 2

If you have any questions or require additional information, please contact me via email at pr by telephone at (512) 427-8154.

Sincerely,

CAROLLO ENGINEERS, INC.

J. Michael Pinckney, P.E., CFM Senior Engineer

JMP:kb

cc: Ekaterina Fitos, City of Houston (via e-mail) Emily Rogers, Bickerstaff Heath (via e-mail)

# City\_of\_Houston\_5827B\_Technical\_RFI\_Extension\_Ltr

# Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Fri 2/24/2023 12:06 PM

To: MPinckney@carollo.com

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

1 attachments (204 KB)

1-City\_of\_Houston\_5827B\_Extension\_Letter\_02.24.2023.pdf;

### Mr. Pinckney,

An extension has been granted for your response to the Technical RFI for the City of Houston's Application No. 5827B to amend WRPERM No. 5827.

The new due date is March 24, 2023.

The extension letter is attached.

If you have any questions or concerns, please do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D. Water Rights Permitting Team Water Availability Division 512-239-4019 Iillian.beerman@tceq.texas.gov Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Erin Chancellor, *Interim Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 24, 2023

Mr. Michael Pinckney Carollo Engineers, Inc. 5316 W Highway 290, Ste 330 Austin, TX 78735-8931 VIA E-MAIL

RE: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827
Texas Water Code § 11.122, Requiring Limited Mailed Notice
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims
Bayou, and White Oak Bayou, San Jacinto River Basin
Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

Dear Mr. Pinckney:

This acknowledges the request, on February 21, 2023, for an extension of time to respond to the Texas Commission on Environmental Quality (TCEQ) request for additional information letter dated January 23, 2023. An extension is granted until March 24, 2023, and after that date the application may be returned pursuant to Title 30 Texas Administrative Code §281.19. No further extensions will be granted associated with this request for information.

If you have any questions concerning the application, please contact Lillian Beerman via email at lillian.beerman@tceq.texas.gov or by telephone at (512) 239-4019.

Sincerely,

). *Brooks McGregor* Brooke McGregor, Manager

Water Rights Permitting and Availability Section

Water Availability Division

# RE: City\_of\_Houston\_5827B\_Technical\_Request\_for\_Information\_Sent

# Michael Pinckney <mpinckney@carollo.com>

Tue 2/21/2023 2:48 PM

To: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Cc: David Harkins · ;Susan Maxwell

-;Fitos, Ekaterina - HPW < Ekaterina. Fitos@houstontx.gov>

1 attachments (190 KB)

BeermanL\_2023-0221\_5827.pdf;

Dr. Beerman,

Please find attached a request for extensions of time to respond to the RFI, thank you.

### Michael Pinckney, PE\*, CFM

Senior Engineer Carollo Engineers 512-427-8154

carollo.com



\*Professional registration in Texas

From: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Sent: Monday, January 23, 2023 11:21 AM

To: Michael Pinckney

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Subject: City of Houston 5827B Technical Request for Information Sent

**CAUTION:** This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Mr. Pinckney,

Please review the attached Technical Request for Information for the City of Houston's Application to amend WRPERM No. 5827.

Your response is due February 22, 2023.

If you have any questions or concerns, do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D.

Water Rights Permitting Team

Water Availability Division

512-239-4019

lillian.beerman@tceq.texas.gov







February 21, 2023

Dr. Lillian Beerman Texas Commission on Environmental Quality 12100 Park 35 Circle Building F, Room 3101 Austin, Texas 78753

Subject: City of Houston WRPERM 5827 CN600128995, RN104258256 Application No. 5827B to Amend

Water Use Permit No. 10-5827.

Dear Dr. Beerman:

This letter requests an extension of time to respond to the Request for Information (RFI) dated January 23, 2023, regarding City of Houston's application to amend Water Use Permit 10-5827. We would like to request at least two additional weeks to confer and finalize the response and an email confirmation of an RFI extension. Finally, could you please update my contact address with the application to 8911 Capital of Texas Highway North, Building 2, Suite 2200, Austin Texas 78759.

Sincerely,

CAROLLO ENGINEERS, INC.

Michael Pinckney P.E. Senior Engineer

MP:kb

cc: Ekaterina Fitos, City of Houston Public Works

Emily Rogers, Bickerstaff Heath Delgado Acosta LLP

# City\_of\_Houston\_5827B\_Technical\_Request\_for\_Information\_Sent

# Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Mon 1/23/2023 11:21 AM

To: MPinckney@carollo.com <

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

1 attachments (598 KB)

City\_of\_Houston\_5827B\_Tech\_RFI\_Sent\_01.23.2023.pdf;

# Mr. Pinckney,

Please review the attached Technical Request for Information for the City of Houston's Application to amend WRPERM No. 5827.

Your response is due February 22, 2023.

If you have any questions or concerns, do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D. Water Rights Permitting Team Water Availability Division 512-239-4019 Iillian.beerman@tceq.texas.gov Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Erin Chancellor, *Interim Executive Director* 



### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 23, 2023

Mr. Michael Pinckney Carollo Engineers, Inc. 5316 W Highway 290, Ste 330 Austin, TX 78735-8931 VIA E-MAIL

RE: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827
Texas Water Code § 11.122, Requiring Limited Mailed Notice
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims
Bayou, and White Oak Bayou, San Jacinto River Basin
Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

Dear Mr. Pinckney:

Additional information is required to complete the technical review of the referenced application.

Provide a completed Water Conservation Plan for agricultural use, developed by Applicant or end-user of the water, that complies with Title 30 Texas Administrative Code (TAC) §288.4. If Applicant does not intend to divert water for agricultural purposes or has not identified a contract customer for the water, a special condition will be included in the amendment requiring that a water conservation plan be submitted prior to diversion of water for this use.

Please provide the requested information by February 22, 2023 or the application may be returned pursuant to Title 30 TAC § 281.19. Alternatively, you may have the question of the necessity of the requested data (or the sufficiency of the information already submitted) referred to the commission for a decision. To be considered, a request for a referral must be provided by February 22, 2023.

If you have any questions concerning this matter, please contact me via email at lillian.beerman@tceq.texas.gov or by telephone at (512) 239-4019.

Sincerely,

Lillian E. Beerman, Ph.D., Project Manager

Lillian C. Beerman, Ph.D.

Water Rights Permitting Team

Water Rights Permitting and Availability Section

### Amendment of City of Houston Water Right Amendment Applications 5827B

Michael Pinckney

Thu 12/1/2022 9:36 AM

To: Lillian Beerman <Lillian.Beerman@Tceq.Texas.Gov>

Cc: David Harkins

;erogers

1 attachments (139 KB)

5827B TCEQ\_Technical\_Report\_Worksheet\_1\_pg.6.pdf;

Dr. Beerman,

The City of Houston Requests to amend its application for Water Right Amendment 5827B to modify the purpose of use to multi-use by adding agricultural use to the existing authorized uses of municipal and industrial. The requested agricultural use will be for the use of water to irrigate golf courses, park land, or other green spaces within the Cities service area pursuant to individual water supply customers.

Thank you.

Michael Pinckney, P.E., CFM Carollo Engineers, Inc. O 512-427-8154

From: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Sent: Friday, November 4, 2022 6:25 PM

To: Michael Pinckney

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Subject: Re: City of Houston Water Right Amendment Applications 5827B and 5826A

**CAUTION:** This email originated from outside Carollo Engineers. Do not open attachments or click links unless you recognize the sender.

Mr. Pinckney,

Management has informed me that you can amend your applications (WRPERM Nos. 5827B and 5826A) to add agricultural use.

Send an email for each application with a summary statement requesting that the application be amended to include a new use (in this instance agriculture) and the place of use for agricultural purposes.

Also, complete *Worksheet 1.2 Amendments - Purpose and Place of Use*, found on page 6 of 23 of the *Technical Information Report*. For your convenience I have attached a copy of the form.

Please if you have any questions or concerns, do not hesitate to contact me.

Thank you,

Lillian E, Beerman, Ph.D.

Water Rights Permitting Team

Water Availability Division

### lillian.beerman@tceq.texas.gov

From: Michael Pinckney <

Sent: Thursday, November 3, 2022 10:47 AM

**To:** Lillian Beerman < <u>Lillian.Beerman@Tceq.Texas.Gov</u>>

Cc: David Harkins < erogers ·

Subject: City of Houston Water Right Amendment Applications 5827B and 5826A

Dr. Beerman,

I was reviewing the City of Houston's existing water right permits 5826 and 5827 and noticed that the purpose of use for both water rights is Municipal and Industrial. The City would like to have these water rights as multi use, or at least add an Irrigation use to the water rights. Can we please amend the current applications, 5827B and 5826A that are in technical review to request the additional use of irrigation to the water rights? That is of course unless it is TCEQ's interpretation that these water rights are already authorized as multi use.

Thank you.

Michael Pinckney, P.E., CFM

Senior Engineer 8911 N Capital of Texas Hwy, Bldg 2, Ste 2200 | Austin, TX 78759 **O** 512-427-8154

carollo.com



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

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**
580,923	Municipal and Industrial	Multi-use (Municipal, Industrial, and Agricultural)	City of Houston's Service Area in Harris, Fort Bend, Brazoria, Chambers, and Galveston Counties in the Trinity, San Jacinto, San Jacinto-Brazos Coastal, and Trinity-San Jacinto Coastal	Same as Existing.
			Basins.	

<sup>\*</sup>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."

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

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

ir	rigated:	O	· •	Ü		Ö	Ü		
i.	all of or	part n and	of a larger	ate a total of tract(s) which a total of	is described	res in any in a sup _acres in_	plemént	ar. This acre attached t	eage is to this

	county, 1711		
ii.	Location of land to be irrigated:	In the_	Original Survey No.
	, Abstract No.		

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

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

- c. Submit Worksheet 1.1, Interbasin Transfers, for any request to change the place of use which moves State Water to another river basin.
- d. See Worksheet 1.2, Marshall Criteria, and submit if required.
- e. See Worksheet 6.0, Water Conservation/Drought Contingency, and submit if required.

<sup>\*\*</sup>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."

Re: City of Houston Water Right Amendment Applications 5827B and 5826A

Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Fri 11/4/2022 6:25 PM

To: Michael Pinckney <

Cc: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

1 attachments (123 KB)

TCEQ\_Technical\_Report\_Worksheet\_1\_pg.6.pdf;

Mr. Pinckney,

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Send an email for each application with a summary statement requesting that the application be amended to include a new use (in this instance agriculture) and the place of use for agricultural purposes.

Also, complete Worksheet 1.2 Amendments - Purpose and Place of Use, found on page 6 of 23 of the Technical Information Report. For your convenience I have attached a copy of the form.

Please if you have any questions or concerns, do not hesitate to contact me.

Thank you,

Lillian E. Beerman, Ph.D.
Water Rights Permitting Team
Water Availability Division
512-239-4019
lillian.beerman@tceq.texas.gov

From: Michael Pinckney <

Sent: Thursday, November 3, 2022 10:47 AM

To: Lillian Beerman < Lillian.Beerman@Tceq.Texas.Gov>

Cc: David Harkins erogers

Subject: City of Houston Water Right Amendment Applications 5827B and 5826A

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I was reviewing the City of Houston's existing water right permits 5826 and 5827 and noticed that the purpose of use for both water rights is Municipal and Industrial. The City would like to have these water rights as multi use, or at least add an Irrigation use to the water rights. Can we please amend the current applications, 5827B and 5826A that are in technical review to request the additional use of irrigation to the water rights? That is of course unless it is TCEQ's interpretation that these water rights are already authorized as multi use.

Thank you.

Michael Pinckney, P.E., CFM
Senior Engineer
8911 N Capital of Texas Hwy, Bldg 2, Ste 2200 | Austin, TX 78759
O 512-427-8154

carollo.com



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

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**

<sup>\*</sup>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."

b. For any request which adds Agricultural purpose of use or changes the place of use for

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

	Agricultural rights, provide the following location rrigated:	on information regarding the lands to be
i.	Applicant proposes to irrigate a total of	acres in any one year. This acreage is described in a supplement attached to this
	application and contains a total of	acres in

	application and contains a total of	acres in	
	County, TX.		
ii.	Location of land to be irrigated: In	the	Original Survey No.
	, Abstract No		

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

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

- Submit Worksheet 1.1, Interbasin Transfers, for any request to change the place of use which moves State Water to another river basin.
- See Worksheet 1.2, Marshall Criteria, and submit if required. d.
- See Worksheet 6.0, Water Conservation/Drought Contingency, and submit if required. e.

<sup>\*\*</sup>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."

### **TCEQ Interoffice Memorandum**

TO: Office of the Chief Clerk

Texas Commission on Environmental Quality

THRU: Chris Kozlowski, Team Leader

Water Rights Permitting Team

FROM: Lillian E. Beerman, Ph.D., Project Manager

Water Rights Permitting Team

DATE: December 16, 2020

SUBJECT: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827
Texas Water Code § 11.122, Requiring Limited Mailed Notice
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims

Bayou, and White Oak Bayou, San Jacinto River Basin Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

The application and partial fees were received on October 22, 2020 and October 29, 2020. Additional information and fees were received on November 6, 2020 and December 4, 2020. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on December 16, 2020. Mailed notice to interjacent water right holders in the San Jacinto River Basin is required pursuant to Title 30 Texas Administrative Code § 295.158(c)(3)(D).

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

Lillian E. Beerman, Ph.D.

Lillian E. Beerman, Ph.D., Project Manager Water Rights Permitting Team Water Rights Permitting and Availability Section

OCC Mailed Notice Required 
√YES □NO

Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director* 



### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 16, 2020

Michael Pinckney Carollo Engineers, Inc. 5316 Highway 290 West, Ste 330 Austin, TX 78735-8931 VIA E-MAIL

RE: City of Houston

WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to Amend Water Use Permit No. 5827
Texas Water Code § 11.122, Requiring Limited Mailed Notice
Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims
Bayou, and White Oak Bayou, San Jacinto River Basin
Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

Dear Mr. Pinckney:

This acknowledges receipt, on December 4, 2020, of additional fees in the amount of \$29.40 (Receipt No. M106676, copy attached).

The application was declared administratively complete and filed with the Office of the Chief Clerk on December 16, 2020. Staff will continue processing the application for consideration by the Executive Director.

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

If you have any questions concerning this matter, please contact me via email at lillian.beerman@tceq.texas.gov or by telephone at (512) 239-4019.

Sincerely,

Lillian E. Beerman, Ph.D.

Lillian E. Beerman, Ph.D., Project Manager Water Rights Permitting Team Water Rights Permitting and Availability Section

Attachment



TCEQ 07-DEC-20 04:34 PM

TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

	1 Serve	nov.		WIR USE PERMITS	Fee Description		
		WATER USE PERMITS	MUB	WOD	Account Name	Account#	Fee Code
		CAROLLO	5827B	M106676	Paid In By	Ref#2	Ref#1
		JARIVERA	120720	1059037	User Data	Card Auth.	Check Number CC Type
Grand Total	Total	CK	Z		Rec Code	Tran Code	CC Type

Slip Key
Document#

Tran Date

Tran Amount

BS00084317 D1801527

07-DEC-20

-\$29.40

Total (Fee Code):

-\$29.40

Grand Total:

-\$794.40

RECEIVED DEC 9 8 2020

Water Availability Tivision



TCEQ 07-DEC-20 04:34 PM

TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

	1 Serve	nov.		WIR USE PERMITS	Fee Description		
		WATER USE PERMITS	MUB	WOD	Account Name	Account#	Fee Code
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Slip Key
Document#

Tran Date

Tran Amount

BS00084317 D1801527

07-DEC-20

-\$29.40

Total (Fee Code):

-\$29.40

Grand Total:

-\$794.40

RECEIVED DEC 9 8 2020

Water Availability Tivision

TRANSMITTAL

Caralla

# Dee 1st

## WATER RIGHTS APPLICATION

FEE

City of Houston

Date:

Nov. 30, 2020

Subject:

Water Rights Application

Project No .:

10603B

Copies To:

n/a

TCEQ

Dr. Lillian Boerman, Project Manager

Address:

Water Rights Permitting Team

P.O. Box 13087 Austin, TX 78711 City of Houston WRPERM 5827

Reference:

CN600128995, RN104258256

Application No. 5827A to amend Water Use Permit No. 5827 Texas Water Code § 11.122, Requiring Limited Mailed Notice Buffalo Bayou, San Jacinto River Basin

Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

The	fol	lowing	items	are:
1110	101	DAM III IC	ILCIIIS	uic.

□ Requested

☐ Report

☐ Cost Estimate

☐ Calculation

☐ Test Result

□ Check Print

☐ Other

☐ Sent Separately

□ Specification

☐ Progress Estimate

Via: Hand Delivered by Loynda Jones, Administrative Assistant

No. of Copies	Description	
1	Check for additional fees for Water Right Application 5827A	

These data are submitted:

☐ For your review

☐ For your files

☐ For your approval

☐ For your action

☐ For your information

Dr. Boerman, Per the RFI letter dated November 19, 2020, enclosed is the requested check in the amount of \$29.40 for additional fees related to limited mailed notice of application 5827A.

CAROLLO ENGINEERS, INC.

J. Michael Pinckney, P.E. Project Manager

RECEIVED DEC 0 5 2020

Enclosures: TCEQ Check and letter dated Nov. 19, 2020

Water Availability Division

OF STATE COMPTROLLER TCEQ

# Water Availability Division Water Rights Permitting and Availability \$eot 676 ≝ -7 ₹ Ph: 512-239-4600, MC 160

Please Return to: MC160 Recording and notice fees \* applicant incorrectly solutified the Permit number. Fees are for 5827-B, not 5827-A

Application No.	5827 <b>B</b>	
Date Check Received	12/04/2020	
Check No.	1059037	
Check Amount	\$29.40	
Payor's Name	Carollo	
Payor's Address	2795 Mitchell Drive Walnutcreek, CA 94598	
Payor's Phone No.	512-495-6405	

					Cara		
TRANSMITTA	Ļ				Dee 1st		
WATER	RIGH	HTS APPLICAT	TION I	Date:	Nov. 30, 2020		
FEE			2	Subject:	Water Rights Application		
City of Ho	uston		j.	Project No.:	10603B		
			(	Copies To:	n/a		
	TCEQ						
	Dr. Lillian Boerman, Project Manager						
Address:	Water Rights Permitting Team						
	P.O. Box 13087						
	Austin, TX 78711						
	City of Houston						
Reference:	WRPERM 5827						
	CN600128995, RN104258256						
	Application No. 5827A to amend Water Use Permit No. 5827 Texas Water Code § 11.122, Requiring Limited Mailed Notice Buffalo Bayou, San Jacinto River Basin						
		Brazoria, Chambers, For					
The following i	tems are:						
⊠ Requested		☐ Report	☐ Cost Estir	nate	☐ Calculation		
⊠ Enclosed		☐ Test Result		nt	☐ Other		
☐ Sent Separ	ately	☐ Specification	☐ Progress I	Estimate			
100 Sept. 100 Se							

Via: Hand Delivered by Loynda Jones, Administrative Assistant

No. of Copies	Description
1	Check for additional fees for Water Right Application 5827A

At your request	☐ For y

our review  $\square$  For your files

☐ For your approval ☐ Fo

☐ For your action

☐ For your information

Dr. Boerman, Per the RFI letter dated November 19, 2020, enclosed is the requested check in the amount of \$29.40 for additional fees related to limited mailed notice of application 5827A.

CAROLLO ENGINEERS, INC.

J. Michael Pinckney, P.E. Project Manager RECEIVED
DEC 0 5 2020

Enclosures: TCEQ Check and letter dated Nov. 19, 2020

Water Availability Division

Jon Niermann, Chairman Emily Lindley, Commissioner Bobby Janecka, Commissioner Toby Baker, Executive Director



### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 19, 2020

Michael Pinckney Carollo Engineers, Inc. 5316 W Highway 290, Ste 330 Austin, TX 78735-8931 VIA E-MAIL

RE:

City of Houston WRPERM 5827

CN600128995, RN104258256

Application No. 5827B to amend Water Use Permit No. 5827 Texas Water Code § 11,122, Requiring Limited Mailed Notice Brays Bayou, Buffalo Bayou, Greens Bayou, Hunting Bayou, Sims Bayou,

and White Oak Bayou, San Jacinto River Basin Harris, Brazoria, Chambers, Fort Bend, and Galveston counties

Dear Mr. Pinckney:

This acknowledges receipt, on October 22, 2020, of the referenced application and partial fees in the amount of \$112.50 (Receipt No. M102714, copy attached).

Before the application can be declared administratively complete, remit fees in the amount of \$29.40, as described below. Please make the check payable to the TCEQ or Texas Commission on Environmental Quality.

Filing Fees	(Amendment)	\$	100.00
Recording Fees	(\$1.25 x 10 pages)	S	12.50
Notice Fees	(\$2.94 x 10 WR Holders)	5	29.40
TOTAL FEES		\$	141.90
FEES RECEIVED		S	112.50
TOTAL FEES DUE		\$	29.40

Please submit the requested fees by December 21, 2020 or the application may be returned pursuant to Title 30 Texas Administrative Code § 281.18.

If you have any questions concerning this matter, please contact me via email at lillian.beerman@tceq.texas.gov or by telephone at (512) 239-4019.

Sincerely,

### Lillian E. Beerman, Ph.D.

Lillian E. Beerman, Ph.D., Project Manager Water Rights Permitting Team Water Rights Permitting and Availability Section

Attachment

# TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

| Ref Code | Ref |

Tran Amount -\$112.50 29-OCT-20 / Tran Date BS00083456 Document# D1800745 Slip Key Tran Code Rec Code Check Number CC Type K Z User Data. Card Auth. VHERNAND 1058794 102920 Paid In By CAROLLO M102714 5827 Ref#2

Grand Total:

Total (Fee Code) :

-\$3,939.03

-\$112.50

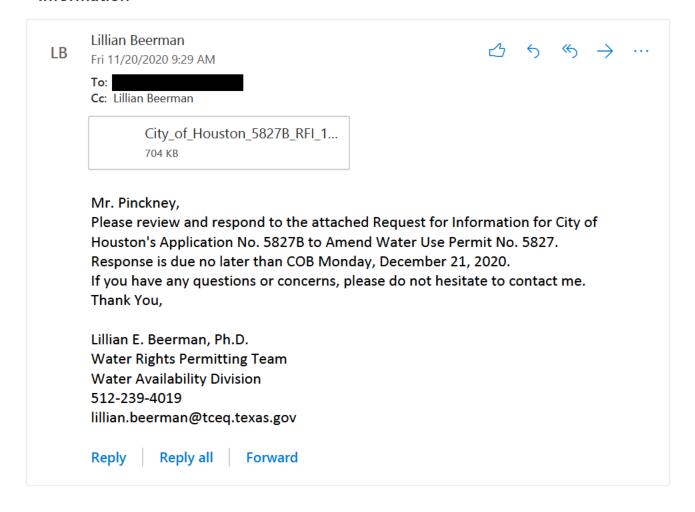
RECEIVED DEC US 2000

Water Availability Division

Page 3 of 3



# City of Houston Application No. 5827B to Amend WRPERM No. 5827\_Request for Information



Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director* 



### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 19, 2020

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Sincerely,

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Lillian E. Beerman, Ph.D., Project Manager Water Rights Permitting Team Water Rights Permitting and Availability Section

Attachment

# TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

PM
04:12
29-OCT-20
TCEO

Account Name Fee Code Account# Fee Description

WUP WUP WIR USE PERMITS

WATER USE PERMITS

Paid In By M102714 5827 Ref#2

Card Auth. User Data, 1058794 102920

Tran Amount

Tran Date

Document#

Slip Key

Tran Code Rec Code

Check Number CC Type

Ref#1

-\$112.50

29-0CT-20 /

BS00083456

D1800745

VHERNAND

CAROLLO

CK z

Total (Fee Code):

Grand Total:

-\$112.50

-\$3,939.03

# Addendum Regarding the State and Regional Water Plans.

For inclusion with Amendment Application of Water Right 5827 submitted the week of October 22, 2020.

The applicant is located within the Region H Planning Group. This application is not inconsistent with the 2016 Regional Water Plan and the 2017 State Water Plan. Water Use Permit 5827 and the reuse of the City's return flows are strategies in the water plans, and adding diversion reaches allows the City to better use the water right. See 2016 Regional Water Plan at Section 3.6.7, 5.4.1, 5.5.4, and Appendix 5-B-REUS-002-1 to 5-B-REUS-002-16.

### **Nita Leifester**

From: Michael Pinckney <

Sent: Thursday, October 22, 2020 10:18 AM

To: Nita Leifester; Bailey Talley

Subject: RE: Water Right Application Submission

Thank you. I received some additional details regarding the check to help identify it when it arrives. The check number is actually #1058794

Copy

1088794

October 21, 2020

Pay One Hundred Twelve and 50/100 Dollars

To Texas Commission on Environmental Quality 12100 Pain Thirty Five Or MC181 Auston TX 78753 112.50

Check Date	10/21/2020					
Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
CK app fee #5627	10/20/2020	9315427	112.50	112.50		
Texas Commission on Environmental	TOTAL	112.50	112.50			
NBAZ AP NEW 12/11	50	0085450				

Michael Pinckney, P.E. Carollo Engineers, Inc. 512-427-8154

From: Nita Leifester [mailto:Nita.Leifester@tceq.texas.gov]

Sent: Thursday, October 22, 2020 9:41 AM

To: Michael Pinckney <a href="mailto:Alley@tceq.texas.gov"> Bailey Talley@tceq.texas.gov</a>

Subject: RE: Water Right Application Submission

Mr. Pinckney,

I was able to download your application and we will get this entered into our system.

Thank you for including the shipping label for the check. I will email our mail room so they may watch for its arrival and send it our way once received.

We will be in touch should we need any further information from you.

Thank you,

Nita Leifester

From: Michael Pinckney < n

Sent: Thursday, October 22, 2020 8:57 AM

To: Bailey Talley < Bailey. Talley@tceq.texas.gov >; Nita Leifester < Nita.Leifester@tceq.texas.gov >

**Subject:** Water Right Application Submission

Good Morning. I just uploaded and shared with you a second water right amendment application for the City of Houston's Water Right 5827 in the San Jacinto River Basin. A hard copy of the application package is being printed today and mailed. A Check for the application fees in the sum of \$112.50 (I think the Check number is #85450, and will be from Carollo Engineers, Inc.) has been mailed also. Unfortunately the check was mailed separately from the application documents and cover letter, I appreciate any advice you can offer with respect to that particular issue. Attached is the shipping label I had received for the check.

### Michael Pinckney, PE

Lead Engineer 5316 Hwy. 290 West, Suite 330 | Austin, TX 78735 **D** 512-427-8154 carollo.com





October 19, 2020

TCEQ Central Office (MC 160) Water Rights Permitting and Availability Section Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

City of Houston Second Application to Amend Water Use Permit No. 5827

(CN: 600128995)

Dear Sir:

The City of Houston (City) is pleased to submit its Second Application to Amend Water Use Permit No. 5827 (Application) to the Texas Commission on Environmental Quality (TCEQ) for review and consideration. The Application has been uploaded to the TCEO's FTP site and an email of its filing has been provided to WRPT@tceq.texas.gov. One hard copy of the Application, along with a check for \$112.50 is enclosed.

The purpose of the Application is to add diversion reaches on Brays, Greens, Hunting, Sims, and White Oak bayous. The City's Application does not contemplate an additional consumptive use of state water or an increased rate or period of diversion and the proposed amendment will not harm any other existing water right.

If you have any questions or concerns, please contact me at (512) 472-8021 or at erogers@bickerstaff.com, or Michael Pinckney or David Harkins at (512) 427-8154 or at mphinckney@carollo.com or dharkins@carollo.com.

Respectfully submitted,

Bickerstaff Heath Delgado Acosta LLP 3711 S. MoPac, Building One, Suite 300

472-8021

(512) 320-5638

By:

State Bar No. 24002863

City of Houston Legal Department Ronald C. Lewis, City Attorney Gwendolyn Hill Webb, Sr. Asst. City Attorney 900 Bagby Street, 4<sup>th</sup> Floor Houston, TX 77002 Phone: (832) 393-6486

Fax: (832) 393-6259

ATTORNEYS FOR CITY OF HOUSTON

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### TCEQ WATER RIGHTS PERMITTING APPLICATION

### ADMINISTRATIVE INFORMATION CHECKLIST

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

APPLICANT(S): City of Houston

/N	Y/N
Administrative Information Report	YWorksheet 3.0
Additional Co-Applicant Information	Additional W.S 3.0 for each Point
Additional Co-Applicant Signature Pages	NRecorded Deeds for Diversion Points
Written Evidence of Signature Authority	N Consent For Diversion Access
Technical Information Report	N Worksheet 4.0
USGS Map (or equivalent)	NTPDES Permit(s)
Map Showing Project Details	N WWTP Discharge Data
Original Photographs	N 24-hour Pump Test
Water Availability Analysis	N Groundwater Well Permit
Worksheet 1.0	N Signed Water Supply Contract
Recorded Deeds for Irrigated Land	N Worksheet 4.1
Consent For Irrigation Land	$\stackrel{Y}{\underline{\hspace{1cm}}}$ Worksheet 5.0
Worksheet 1.1	Addendum to Worksheet 5.0
Addendum to Worksheet 1.1	N Worksheet 6.0
Worksheet 1.2	N Water Conservation Plan(s)
Addendum to Worksheet 1.2	NDrought Contingency Plan(s)
Worksheet 2.0	NDocumentation of Adoption
Additional W.S 2.0 for Each Reservoir	N Worksheet 7.0
Dam Safety Documents	NAccounting Plan
Notice(s) to Governing Bodies	$\frac{Y}{Worksheet}$ Worksheet 8.0
Recorded Deeds for Inundated Land	YFees
Consent For Inundation Land	

### ADMINISTRATIVE INFORMATION REPORT

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

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

1.	TYPE OF APPLICATION (Instructions, Page. 6)
Indica	ite, by marking X, next to the following authorizations you are seeking.
	New Appropriation of State Water
	XAmendment to a Water Right *
	Bed and Banks
owne match co-ow be ret recor subm amen	u are seeking an amendment to an existing water rights authorization, you must be the rof record of the authorization. If the name of the Applicant in Section 2, does not the the name of the current owner(s) of record for the permit or certificate or if any of the mers is not included as an applicant in this amendment request, your application could turned. If you or a co-applicant are a new owner, but ownership is not reflected in the ds of the TCEQ, submit a change of ownership request (Form TCEQ-10204) prior to itting the application for an amendment. See Instructions page. 6. Please note that an dment application may be returned, and the Applicant may resubmit once the change or ship is complete.
	e summarize the authorizations or amendments you are seeking in the space below or a narrative description entitled "Summary of Request."
Pleas	e see attached Summary of Request.

## 2. APPLICANT INFORMATION (Instructions, Page. 6)

a.

Applicant		
Indicate the number of App (Include a copy of this secti	licants/Co-A <sub>l</sub> on for each (	pplicants <u>1</u> Co-Applicant, if any)
What is the Full Legal Name	of the individ	ual or entity (applicant) applying for this permit?
City of Houston		
		ne must be spelled exactly as filed with the Texas documents forming the entity.)
You may search for your CN	on the TCEQ	ith the TCEQ, what is the Customer Number (CN)? website at x.cfm?fuseaction=cust.CustSearch
CN : 600128995	( leav	ve blank if you do not yet have a CN).
application is signed by an ir	ndividual appl	or persons signing the application? Unless an licant, the person or persons must submit written uirements in 30 TAC § 295.14.
First/Last Name:		
Title:		
Have you provided writte 295.14, as an attachment		eeting the signatory requirements in 30 TAC § cation?
What is the applicant's mailing may verify the address on the https://tools.usps.com/go/Z	e USPS websit	
Name:		
Mailing Address:		
City:	State:	ZIP Code:
Indicate an X next to the type	e <b>of Applican</b>	t:
Individual	Sole Pro	oprietorship-D.B.A.
Partnership	Corpora	ation
Trust	Estate	
Federal Government	State Go	overnment
County Government	XCity Gov	vernment
Other Government	Other_	
For Corporations or Limited State Franchise Tax ID Numb		provide: SOS Charter (filing) Number:

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

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

First and Last Name: Michael Pinckney

Title: Lead Engineer

Organization Name: Carollo Engineers, Inc.
Mailing Address: 5316 Highway 290 West S

City: Austin State: Texas ZIP Code: 78735

Phone No.: 512-427-8154 Extension:

Fax No.: E-mail Address:

# 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 futu	re notices be receive	d on my/our behalf at the	e following:
First and Last Name:			
Title:			
Organization Name:			
Mailing Address:			
City:	State:	ZIP Code:	
Phone No.:	Extens	sion:	
Fax No.:	E-mail	Address:	

### 5. MISCELLANEOUS INFORMATION (Instructions, Page. 9)

- a. The application will not be processed unless all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol by all applicants/co-applicants. If you need assistance determining whether you owe delinquent penalties or fees, please call the Water Rights Permitting Team at (512) 239-4691, prior to submitting your application.
  - 1. Does Applicant or Co-Applicant owe any fees to the TCEQ? Yes / No No

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

Amount past due:

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

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

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

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

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

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

### SIGNATURE PAGE (Instructions, Page. 11) Applicant: Director, Houston Public Works (Typed or printed name) 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. Haddal Date: 10/13/2020 Signature: \_\_\_\_ (Use blue ink) Subscribed and Sworn to before me by the said day of October, 2020. 9th day of March, 2023. on this My commission expires on the\_\_\_ Puth C. Bocaregra RUTH C. BOCANEGRA Notary Public Notary Public, State of Texas [SEAL] Comm. Expires 03-09-2023

County, Texas

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

# Summary of Request

The City of Houston (City) is requesting the Texas Commission on Environmental Quality (TCEQ) to amend their water use permit no. 5827 to add diversion reaches on Brays, Greens, Hunting, Sims, and White Oak Bayous in lieu of the current return flow diversion points. Specifically, the City wishes to add the following diversion reaches to the five bayous:

- **Brays Bayou:** Three diversion reaches added between the upper-most wastewater treatment plant (WWTP) discharge location and extending downstream to Buffalo Bayou.
- Greens Bayou: Ten diversion reaches added between the upper-most WWTP discharge location and extending downstream to Galveston Bay.
- **Hunting Bayou:** One diversion reach added between the WWTP discharge location and Buffalo Bayou.
- **Sims Bayou:** Six diversion reaches added between the upper-most WWTP discharge location and extending downstream to Buffalo Bayou.
- White Oak Bayou: Three diversion reaches added between the upper-most WWTP discharge location and extending downstream to Buffalo Bayou.

Table 1 presents the requested diversion rate and volume of flow diverted, by bayou and diversion reach. The requested diversion rates are based on the permitted discharge volumes of the upstream WWTPs currently authorized in water use permit no. 5827 while a 5 percent channel loss is included in the maximum diversion volume. The maximum combined diversion rate and volume are calculated per bayou.

Table 1: Requested Return Flow Diversions by Reach.

Bayou/Reach	Diversion Rate (cfs)	Diversion Rate (gpm)	Maximum Diversion (ac-ft/yr)	Maximum Combined Diversion Rate (cfs)	Maximum Combined Diversion Rate (gpm)	Maximum Combined Diversion (ac-ft/yr)
Brays Bayou						
Reach #1	48.5	21,764	33,352			
Reach #2	95.4	42,806	65,598	188	84,472	129,450
Reach #3	188	84,472	129,450			
Greens Bayou						
Reach #1	3.09	1,389	2,128			
Reach #2	5.42	2,431	3,725			
Reach #3	11.2	5,007	7,673		27,533 42,3	
Reach #4	17.3	7,785	11,930			42,194
Reach #5	29.7	13,340	20,443	61.3		
Reach #6	30.8	13,826	21,188			
Reach #7	38.5	17,299	26,509			
Reach #8	39.3	17,638	27,029			
Reach #9	50.1	22,499	34,478			
Reach #10	61.3	27,533	42,194			
Hunting Bayou						
Reach #1	6.19	2,778	4,257	6.19	2,778	4,257
Sims Bayou				<u> </u>	<u> </u>	

Bayou/Reach	Diversion Rate (cfs)	Diversion Rate (gpm)	Maximum Diversion (ac-ft/yr)	Maximum Combined Diversion Rate (cfs)	Maximum Combined Diversion Rate (gpm)	Maximum Combined Diversion (ac-ft/yr)
Reach #1	10.9	4,896	7,503		70,694	108,336
Reach #2	41.9	18,785	28,787			
Reach #3	52.7	23,646	36,236	158		
Reach #4	63.1	28,333	43,420	138		
Reach #5	119	53,333	81,731			
Reach #6	158	70,694	108,336			
White Oak Bayou						
Reach #1	6.19	2,778	4,257		15,969	24,471
Reach #2	34.0	15,278	23,413	35.6		
Reach #3	35.6	15,969	24,471			

### Signatory Authority

Agenda - Jan. 28, 2009 Trem+
MOTION NO. 2009 0026

MOTION by Council Member Khan that the recommendation from the Director of the Department of Public Works and Engineering, relative to signing water rights applications on behalf of the City of Houston, be adopted, and in accordance with the State of Texas under 30TAC§295.14, the Director of the Department of Public Works and Engineering is hereby given signatory authority on behalf of the City of Houston and any successor organization of the City of Houston.

Seconded by Council Member Green and carried.

Mayor White, Council Members Lawrence, Johnson, Clutterbuck, Adams, Sullivan, Khan, Holm, Rodriguez, Brown, Lovell, Green and Jones voting aye Nays none Council Member Noriega absent

PASSED AND ADOPTED this 28th day of January, 2009.

Pursuant to Article VI, Section 6 of the City Charter, the effective date of the foregoing motion is February 3, 2009.

City Secretary

# TECHNICAL INFORMATION REPORT WATER RIGHTS PERMITTING

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

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

# 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 No
- 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 No (If yes, indicate the Certificate or Permit number:\_\_\_\_)

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

c. Applicant requests to extend an existing Term authorization or to make the right permanent?  $Y / N \gamma_{es}$  (If yes, indicate the Term Certificate or Permit number:\_\_\_\_\_)

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

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

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

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

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

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

Water Right (Certificate	or Permit) number you are requesting	ng to amend: <sup>5827</sup>
<u> </u>	,	0

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  $_{
m N}$ 

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  $_{
  m N}$  If yes, submit:
  - Worksheet 1.0 Quantity, Purpose, and Place of Use Information Worksheet
  - Worksheet 1.2 Notice: "Marshall Criteria"
- d. Applicant requests to change: diversion point(s); or reach(es); or diversion rate? Y / N Y

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

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

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

- f. Other Applicant requests to change any provision of an authorization not mentioned above? Y / N N If yes, call the Water Availability Division at (512) 239-4691 to discuss. Additionally, all amendments require:
  - Worksheet 8.0 Calculation of Fees; and Fees calculated see instructions Page.34
  - Maps See instructions Page. 15.
  - Additional Documents and Worksheets may be required (see within).

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

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

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

- 1. Purchaser must submit the worksheets required under Section 1 above with the Contract Water identified as an alternate source; or
- 2. Seller must amend its underlying water right under Section 2.
- b. Applicant requests to convey water imported into the state from a source located wholly outside the state using the bed and banks of a watercourse? TWC § 11.042(a-1). Y / N  $_{
  m N}$

*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  $_{
m N}$ 

*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  $_{
m N}$ 

*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  $_{
m N}$ 

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

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

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

a.	Provide information describing how this application addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement (not required for applications to use groundwater-based return flows). Include citations or page numbers for the State and Regional Water Plans, if applicable. Provide the information in the space below or submit a supplemental sheet entitled "Addendum Regarding the State and Regional Water Plans":
	Please see attached Summary of Request.
b.	Did the Applicant perform its own Water Availability Analysis? Y / N $_{ m N}$
	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) $Y/N\gamma$

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

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

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

1. I	Location	Information	Regarding	the Lands	to be Irrigated
------	----------	-------------	-----------	-----------	-----------------

i)	Applicant proposes to irrigate a total		acres in any			
	all of or part of a larger tract(s) wh			olement atta	ched to	this
	application and contains a total of _		acres in		County,	TX.
ii)	Location of land to be irrigated:	In the _		Original	Survey	No.
	, Abstract No	·				

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

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

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

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

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

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

<sup>\*</sup>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."

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 followi irrigated:	ing location info	rmation rega	rding the lands to be
<ul> <li>i) Applicant proposes to irrigate a tota all of or part of a larger tract(s) wh application and contains a total of County, TX.</li> </ul>	nich is described	l in a supple	e year. This acreage is ment attached to this
ii) Location of land to be irrigated: , Abstract No.	In the		_Original Survey No.

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

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

- c. Submit Worksheet 1.1, Interbasin Transfers, for any request to change the place of use which moves State Water to another river basin.
- d. See Worksheet 1.2, Marshall Criteria, and submit if required.
- e. See Worksheet 6.0, Water Conservation/Drought Contingency, and submit if required.

<sup>\*\*</sup>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."

### WORKSHEET 1.1 INTERBASIN TRANSFERS, TWC § 11.085

Not Applicable

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

Interhasin Transfer Request (Instructions, Page, 20)

 merbush runsier request (motruetions, ruge, 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;
- 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"

Not Applicable

This worksheet assists the Commission in determining notice required for certain **amendments** that do not already have a specific notice requirement in a rule for that type of amendment, and that do not change the amount of water to be taken or the diversion rate. The worksheet provides information that Applicant **is required** to submit for such amendments which include changes in use, changes in place of use, or other non-substantive changes in a water right (such as certain amendments to special conditions or changes to off-channel storage). These criteria address whether the proposed amendment will impact other water right holders or the onstream 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. <u>Administrative Requirements and Fees.</u> 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. <u>Beneficial Use.</u> 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. <u>Public Welfare</u>. 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. <u>Groundwater Effects.</u> Discuss effects of proposed amendment on groundwater or groundwater recharge.

- e. <u>State Water Plan.</u> 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: <a href="http://www.twdb.texas.gov/waterplanning/swp/index.asp">http://www.twdb.texas.gov/waterplanning/swp/index.asp</a>.
- f. <u>Waste Avoidance</u>. 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. <u>Impacts on Water Rights or On-stream Environment</u>. Explain how proposed amendment will not impact other water right holders or the on-stream environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

#### Not Applicable

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).

	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)
	<ol> <li>Applicant has verified on-channel or off-channel determination by contacting Surface Water Availability Team at (512) 239-4691? Y / N</li> </ol>
	2. If on-channel, will the structure have the ability to pass all State Water inflows that Applicant does not have authorization to impound? Y / N
d.	Is the impoundment structure already constructed? $Y / N$
	i. For already constructed <b>on-channel</b> structures:
	Date of Construction:
	<ol> <li>Was it constructed to be an exempt structure under TWC § 11.142? Y/N         <ul> <li>a. If Yes, is Applicant requesting to proceed under TWC § 11.143? Y/N</li> <li>b. If No, has the structure been issued a notice of violation by TCEQ? Y/N</li> </ul> </li> </ol>
	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 Noand watershed project name; b. Authorization to close "ports" in the service spillway requested? Y/N
	ii. For <b>any</b> proposed new structures or modifications to structures:
	1. Applicant <b>must</b> contact TCEQ Dam Safety Section at (512) 239-0326, <i>prior to submitting an Application.</i> Applicant has contacted the TCEQ Dam Safety Section regarding the submission requirements of 30 TAC, Ch. 299? <b>Y / N</b> 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

d. Engineer's statement that structure complies with 30 TAC, Ch. 299 Rules

b. Plans (with engineer's seal) for the structure required. Y / N

c. Engineer's signed and sealed hazard classification required. Y/N

required. Y/N

		reservoir to be constructed, will be located submit a copy of all the notices and certif. Application. Notices and cards are included	d. (30 TAC § 295.42). Applicant must lied mailing cards with this
	iii. A	dditional information required for on-cham	nel storage:
	1.	Surface area (in acres) of on-channel reser level:	voir at normal maximum operating
	2.	Based on the Application information pro- area above the on-channel dam or reservo calculate the drainage area they may do so Applicant has calculated the drainage area If yes, the drainage area iss (If assistance is needed, call the Surface Wo submitting the application, (512) 239-4691	oir. If Applicant wishes to also o at their option. a. Y/N sq. miles. atter Availability Team prior to
2.	Struct	ure Location (Instructions, Page. 2	23)
b.	Zip Code	course (if on-channel) (USGS name):e:	
C.	m tпе No	Original Survey No ,County,	Texas.
	* A copy submitte inundat	of the deed(s) with the recording informated describing the tract(s) that include the sed.	ition from the county records must be structure and all lands to be
	or will b docume	Applicant is not currently the sole owner one built and sole owner of all lands to be in intation evidencing consent or othe <b>r docun</b> use the land described.	undated, Applicant must submit
d.	A point (off-char	on the centerline of the dam (on-channel) on nnel) is:	r anywhere within the impoundment
	Latitude	°N, Longitude	<u>°</u> W.
	*Provide places	e Latitude and Longitude coordinates in de	ecimal degrees to at least six decimal
di.	Indicate Mapping	the method used to calculate the location (egram):	examples: Handheld GPS Device, GIS,
dii.	Map sub lands to	mitted which clearly identifies the Impound be inundated. See instructions Page. 15. Y	lment, dam (where applicable), and the / 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

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).

L.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point NoDiversion Point NoDownstream Limit of Diversion Reach No	ays Bayou 1
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, si	is point share a diversion rate with other points?  """""""""""""""""""""""""""""""""""	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? $Y / N N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation of	•
e.	Check (1	<ul> <li>ion of Section 1, New of Additional Appropriation of</li> <li>i) the appropriate box to indicate diversion location is existing or proposed):</li> </ul>	
е.	Check (diversional Check	√) the appropriate box to indicate diversion location	
е.	Check ( <sup>1</sup>	√) the appropriate box to indicate diversion location	on and indicate whether the
e.	Check (diversional Check one	√) the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversional Check one	the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou c. Location of point: In the D Hanson Original Survey No. $\frac{201}{}$ , Abstract No. $\frac{381}{}$ , $\frac{\text{Harris}}{}$ 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: °N, Longitude 95.567322 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	Brays Bayou 1
b.		m Rate of Diversion for <b>this new point</b> 485 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	is point share a diversion rate with other points?  """ ubmit Maximum Combined Rate of Diversion for a "" eaches gpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
	comple	ncrease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	of State Water.
е.	Check (	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
	Check	ar research and are property.	
- 11	one		Write: Existing or Proposed
	×	Directly from stream	Write: Existing or Proposed  Proposed
		Directly from stream From an on-channel reservoir	
		•	
		From an on-channel reservoir	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou 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: °N, Longitude 95.530046 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. $2$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point No. Upstream Limit of Diversion Reach No. Bra Downstream Limit of Diversion Reach No	ays Bayou 2
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, si	s point share a diversion rate with other points?  abmit Maximum Combined Rate of Diversion for a general gene	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
е.	diversio Check		on and indicate whether the  Write: Existing or Proposed
e.	diversio		
e.	Check one	n location is existing or proposed):	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou 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: °N, Longitude 95.530046 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	Brays Bayou 2
b.		m Rate of Diversion for <b>this new point</b> 95.4 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	is point share a diversion rate with other points?  """""""""""""""""""""""""""""""""""	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation of	•
	•		
e.	Check (	) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
е.	diversio Check	) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	diversio	) the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream	
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou c. Location of point: In the PWRose Original Survey No. $\frac{201}{}$ , Abstract No. $\frac{645}{}$ , $\frac{Harris}{}$ 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: °N, Longitude 95.44712 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): GIS

2.

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.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Bra Downstream Limit of Diversion Reach No		
b.		ım Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)	
C.	If yes, s	is point share a diversion rate with other points?  """ ubmit Maximum Combined Rate of Diversion for a "" eaches gpm		
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
		ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation o	•	
e.	Check (	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the	
	Check one		Write: Existing or Proposed	
	X			
- 1		Directly from stream	Proposed	
		Directly from stream From an on-channel reservoir	Proposed	
		•	Proposed	
		From an on-channel reservoir	Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou c. Location of point: In the PWRose Original Survey No. $\frac{201}{}$ , Abstract No. $\frac{645}{}$ , $\frac{Harris}{}$ 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: °N, Longitude 95.44712 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): GIS

2.

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.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2.	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Brays Bayou 3
b.		ım Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation o	•
е.	Check ( diversion	<ul> <li>the appropriate box to indicate diversion location on location is existing or proposed):</li> </ul>	on and indicate whether the
	Check	in location to existing of proposed).	
		or proposedy.	Write: Existing or Proposed
	one X	Directly from stream	Write: Existing or Proposed  Proposed
	one		
	one	Directly from stream	
	one	Directly from stream From an on-channel reservoir	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Brays Bayou **b.** Zip Code: 77012 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: °N, Longitude 95.278374 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Gro Downstream Limit of Diversion Reach No		
b <b>.</b>		m Rate of Diversion for <b>this new point</b> <sup>3.1</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, su	is point share a diversion rate with other points?  """""""""""""""""""""""""""""""""""		
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation of	•	
e.			on and indicate whether the	
e.	Check (	) the appropriate box to indicate diversion location location location is existing or proposed):		
е.	Check (diversional Check	) the appropriate box to indicate diversion location	on and indicate whether the  Write: Existing or Proposed	
е.	Check (	) the appropriate box to indicate diversion location		
е.	Check (ndiversional Check one	/) the appropriate box to indicate diversion location location location is existing or proposed):	Write: Existing or Proposed	
e.	Check (ndiversional Check one	) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check (ndiversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the WHYork Original Survey No. 201 , Abstract County, Texas. No. 943 Harris 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: °N, Longitude 95.530155 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 1
b.		nm Rate of Diversion for <b>this new point</b> 3.1 gpm (gallons per minute)	_ cfs (cubic feet per second)
C.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reaches	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation o	•
	Chack (		
е.	diversion	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
e.	diversion Check	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	diversio	√) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	
е.	Check one	on location is existing or proposed):	Write: Existing or Proposed
е.	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	on location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the WCRRCO Original Survey No. $\underline{^{201}}$ , Abstract No. $\underline{^{889}}$ , $\underline{^{Harris}}$ 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: °N, Longitude 95.435543 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Gre Downstream Limit of Diversion Reach No		
b.		ım Rate of Diversion for <b>this new point</b> 5-4 gpm (gallons per minute)	_ cfs (cubic feet per second)	
C.	If yes, s	nis point share a diversion rate with other points?  Submit Maximum Combined Rate of Diversion for a reachesgpm		
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
	comple	ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation of	of State Water.	
e.	Check ( diversion	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the	
	Check			
	one		Write: Existing or Proposed	
	×	Directly from stream	Write: Existing or Proposed  Proposed	
		Directly from stream From an on-channel reservoir		
		•		
		From an on-channel reservoir		

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the WCRRCO Original Survey No. $\underline{^{201}}$ , Abstract No. $\underline{^{889}}$ , $\underline{^{Harris}}$ 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: °N, Longitude 95.435543 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): GIS

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

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.

2.

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).

l.	Divers	ion Information (Instructions, Page. $2^{4}$	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 2	
b.		n Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, su	s point share a diversion rate with other points?  Share of Diversion for a graches cfs or gpm		
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y/NN	
		crease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation o	•	
е.		) the appropriate box to indicate diversion location location is existing or proposed):	n and indicate whether the	
е.	diversion Check		n and indicate whether the  Write: Existing or Proposed	
е.	Check one		Write: Existing or Proposed	
е.	diversion Check	n location is existing or proposed):		
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
e.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the M Sevey Original Survey No. 201 , Abstract County, Texas. No. 699 Harris 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: °N, Longitude 95.401137 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2. x	Diversion Point No. Upstream Limit of Diversion Reach No. Gro Downstream Limit of Diversion Reach No		
b.		m Rate of Diversion for <b>this new point</b> <sup>112</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, s	is point share a diversion rate with other points? ubmit Maximum <b>Combined</b> Rate of Diversion for a reachescfs orgpm		
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
	complet	ncrease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•	
e.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the	
е.	diversio	<ul> <li>the appropriate box to indicate diversion location location is existing or proposed):</li> </ul>		
e.	diversion Check	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed	
е.	diversio	v) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream		
е.	Check one	on location is existing or proposed):	Write: Existing or Proposed	
е.	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the M Sevey Original Survey No. 201 , Abstract County, Texas. No. 699 Harris 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: °N, Longitude 95.401137 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): GIS

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

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.

2.

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).

L.	Divers	ion Information (Instructions, Page. $2^{4}$	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 3	
b <b>.</b>		n Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, su	s point share a diversion rate with other points?  Share of Diversion for a caches		
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$	
		crease in diversion rate is considered a new appropon on of Section 1, New or Additional Appropriation o	•	
e.		) the appropriate box to indicate diversion location location is existing or proposed):	n and indicate whether the	
е.	diversion Check	) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed	
е.	Check one		Write: Existing or Proposed	
е.	diversion Check	n location is existing or proposed):		
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the M Sevey Original Survey No. 201 , Abstract County, Texas. No. 699 Harris 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: °N, Longitude 95.390248 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Gr Downstream Limit of Diversion Reach No.		
b <b>.</b>		m Rate of Diversion for <b>this new point</b> <sup>173</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, su	is point share a diversion rate with other points?  """ which is a point share a diversion for a general state of the general state of		
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation of	•	
e.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the	
e.	diversio	the appropriate box to indicate diversion location in location is existing or proposed):		
е.	diversio Check	√) the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed	
е.	diversio	√) the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream		
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed	
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the M Sevey Original Survey No. 201 , Abstract County, Texas. No. 699 Harris 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: °N, Longitude 95.390248 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 4
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points? ubmit Maximum <b>Combined</b> Rate of Diversion for a reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation of	•
e.	Check ( diversion	e. Check $()$ the appropriate box to indicate diversion location and indicate whether the	
		on location is existing or proposed):	
	Check	on location is existing or proposed):	Write: Existing or Proposed
		on location is existing or proposed):  Directly from stream	
	Check one		Write: Existing or Proposed
	Check one	Directly from stream	Write: Existing or Proposed
	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the MMC Auley Original Survey No. 201 , Abstract County, Texas. No. 577 Harris 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: °N, Longitude 95.34974 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Gre Downstream Limit of Diversion Reach No	
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  "" which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion rate with other points?  """ which is a diversion for a diversio	
d.	For am	endments, is Applicant seeking to increase combin	ed diversion rate? $Y / N N$
e.	complex Check (	<ul> <li>For amendments, is Applicant seeking to increase combined diversion rate? Y / N N</li> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>Check (√) the appropriate box to indicate diversion location and indicate whether the</li> </ul>	
	Check	on location is existing or proposed):	Write: Existing or Proposed
	Check one	on location is existing or proposed):	Write: Existing or Proposed
	Check	on location is existing or proposed):  Directly from stream	
	Check one	on location is existing or proposed):	Write: Existing or Proposed
	Check one	on location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the MMC Auley Original Survey No. 201 , Abstract County, Texas. No. 577 Harris 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: °N, Longitude 95.34974 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): GIS

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

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.

2.

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).

L.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 5
b.	Maximum Rate of Diversion for <b>this new point</b> <sup>29.7</sup> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, su	s point share a diversion rate with other points?  abmit Maximum Combined Rate of Diversion for a  eachescfs orgpm	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
	<ul> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>e. Check (√) the appropriate box to indicate diversion location and indicate whether the</li> </ul>		oriation and would require
e.	complete Check (v	ion of Section 1, New or Additional Appropriation of	of State Water.
е.	Check (v	on of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location	of State Water.
e.	Check (v	on of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location	of State Water.  on and indicate whether the
e.	Check (vidiversional Check one	on of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):	of State Water.  on and indicate whether the  Write: Existing or Proposed
е.	Check (vidiversional Check one	on of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	of State Water.  on and indicate whether the  Write: Existing or Proposed
е.	Check (vidiversional Check one	on of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	of State Water.  on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the SWUpshaw Original Survey No. 201 , Abstract No. 818 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: °N, Longitude 95.291469 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): GIS

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

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.

2.

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).

1.	Diversion Information (Instructions, Page. 24)		4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	1 2 3	Diversion Point NoDiversion Reach No. GreenDownstream Limit of Diversion Reach No.	eens Bayou 6
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  cfs or gpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
e.	complex Check (	ncrease in diversion rate is considered a new approposition of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location location is existing or proposed):	of State Water.
	Check		
_	one		Write: Existing or Proposed
	Χ	Directly from stream	Write: Existing or Proposed  Proposed
	Χ	Directly from stream From an on-channel reservoir	
	X	-	
	X	From an on-channel reservoir	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the SWUpshaw Original Survey No. 201 , Abstract No. 818 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: °N, Longitude 95.291469 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): GIS

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

g. If the Plan of Diversion is complicated and not readily discernable from looking at the

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2.

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).

1.	Diversion Information (Instructions, Page. 24)		4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 6
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, su	is point share a diversion rate with other points?  """""""""""""""""""""""""""""""""""	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
	<ul> <li>For amendments, is Applicant seeking to increase combined diversion rate? Y / N N</li> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>Check (√) the appropriate box to indicate diversion location and indicate whether the</li> </ul>		
e.	Check (1		on and indicate whether the
е.	Check ( <sup>1</sup>	√) the appropriate box to indicate diversion location location is existing or proposed):	
е.	Check (1	n location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversional Check		
е.	Check (diversional Check one	n location is existing or proposed):	Write: Existing or Proposed
e.	Check (diversional Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
e.	Check (diversional Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the A Smith Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 694 Harris 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: °N, Longitude 95.277530 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)		
a.	This Worksheet is to add new (select 1 of 3 below):				
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Green Green Green Green Green No. Green Green Green Green No. Green Gr			
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)				
c.	If yes, st	is point share a diversion rate with other points? ubmit Maximum <b>Combined</b> Rate of Diversion for a reachescfs orgpm			
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y/NN		
	** 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	on and indicate whether the		
е.	diversio	f) the appropriate box to indicate diversion location in location is existing or proposed):			
е.	diversio Check	√) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed		
е.	diversio	v) the appropriate box to indicate diversion location in location is existing or proposed): Directly from stream			
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed		
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed		
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed		

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the A Smith Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 694 Harris 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: °N, Longitude 95.277530 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): GIS

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

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.

2.

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).

L.	Diversion Information (Instructions, Page. 24)		4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 7
b <b>.</b>	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, su	s point share a diversion rate with other points?  shall be able to be a continum combined Rate of Diversion for a continuous caches	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
	** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.  • Check (√) the appropriate box to indicate diversion location and indicate whether the		•
e.	Check (	) the appropriate box to indicate diversion location	
e.	Check (v		
е.	Check (v	) the appropriate box to indicate diversion location	on and indicate whether the
е.	Check (v diversio Check one	) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (v diversio Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
e.	Check (v diversio Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the AJ Holder Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{322}{100}$ , $\frac{1}{100}$ , Abstract 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: °N, Longitude 95.228474 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)	
a.	This Wo	This Worksheet is to add new (select 1 of 3 below):		
	1 2 3	Diversion Point No. Upstream Limit of Diversion Reach No. GreDownstream Limit of Diversion Reach No	eens Bayou 8	
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)			
c.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reachescfs orgpm		
d.	For am	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
e.	comple Check (	ncrease in diversion rate is considered a new approposition of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):	of State Water.	
	Check		Write: Existing or Proposed	
	X	Directly from stream	Proposed	
		From an on-channel reservoir	•	
		Every a etween to an an abanyal vecessis		
		From a stream to an on-channel reservoir		
		Other method (explain fully, use additional sheets if necessary)		

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the AJ Holder Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{322}{100}$ , $\frac{1}{100}$ , Abstract 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: °N, Longitude 95.228474 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): GIS

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

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.

2.

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).

1.	Diver	Diversion Information (Instructions, Page. 24)	
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2.	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 8
b <b>.</b>	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb{N}$
e.	complex Check (	ncrease in diversion rate is considered a new approposition of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):	of State Water.
	Check		Write: Existing or Proposed
	×		
		Directly from stream	Proposed
		Directly from stream From an on-channel reservoir	Proposed
		-	Proposed
		From an on-channel reservoir	Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the W Hedge Original Survey No. 201 , Abstract County, Texas. No. 335 Harris 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: °N, Longitude 95.234137 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): GIS

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

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.

2.

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2. x	Diversion Point No. Upstream Limit of Diversion Reach No. Gro Downstream Limit of Diversion Reach No	
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points? ubmit Maximum Combined Rate of Diversion for a reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
e.	Check (	$\sqrt{\ }$ ) the appropriate box to indicate diversion location	on and indicate whether the
е.	diversio	<ul> <li>the appropriate box to indicate diversion location on location is existing or proposed):</li> </ul>	
e.	diversion Check	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	diversio	v) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	
е.	Check one	on location is existing or proposed):	Write: Existing or Proposed
e.	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the W Hedge Original Survey No. 201 , Abstract County, Texas. No. 335 Harris 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: °N, Longitude 95.234137 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): GIS

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

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.

2.

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).

1.	Diversion Information (Instructions, Page. 24)		4)	
a.	This Wo	orksheet is to add new (select 1 of 3 below):		
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 9	
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)			
C.	If yes, s	is point share a diversion rate with other points? ubmit Maximum Combined Rate of Diversion for a reachescfs orgpm		
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN	
	** 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			
е.	Check (	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the	
е.	diversio Check	v) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed	
е.	diversio	v) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream		
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed	
е.	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the WP Harris/R Wilson Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{32}{100}$ , Harris 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: °N, Longitude 95.213298 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): GIS

2.

Page. 38.

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

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Gre Downstream Limit of Diversion Reach No	
b.	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or gpm (gallons per minute)		
c.	If yes, s	is point share a diversion rate with other points? ubmit Maximum Combined Rate of Diversion for a reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
e.	comple	acrease in diversion rate is considered a new approposition of Section 1, New or Additional Appropriation of $\forall$ ) the appropriate box to indicate diversion location	of State Water.
_	diversio	on location is existing or proposed):	
	Check one		Write: Existing or Proposed
	X		
- 11	^	Directly from stream	Proposed
	^	Directly from stream From an on-channel reservoir	Proposed
	^	•	Proposed
	^	From an on-channel reservoir	Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou c. Location of point: In the WP Harris/R Wilson Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{32}{100}$ , Harris 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: °N, Longitude 95.213298 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): GIS

2.

Page. 38.

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

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).

l.	Divers	sion Information (Instructions, Page. $2^{4}$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Greens Bayou 10
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  Share of Diversion for a graches gpm	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y/NN
		crease in diversion rate is considered a new approp ion of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location is existing or proposed):	n and indicate whether the
е.	diversion Check		on and indicate whether the  Write: Existing or Proposed
e.	Check one		Write: Existing or Proposed
е.	diversion Check	n location is existing or proposed):	
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Greens Bayou **b.** Zip Code: 77015 c. Location of point: In the $\underline{\text{W Vince}}$ Original Survey No. $\underline{\text{201}}$ , Abstract \_\_\_\_County, Texas. No. 79 Harris 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: °N, Longitude 95.166909 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): GIS

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

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.

2.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2. ×	Diversion Point No. Upstream Limit of Diversion Reach No. Hu Downstream Limit of Diversion Reach No	
b.		m Rate of Diversion for <b>this new point</b> <sup>62</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	is point share a diversion rate with other points?  """""""""""""""""""""""""""""""""""	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		crease in diversion rate is considered a new approp	•
e.		ion of Section 1, New or Additional Appropriation o	
e.	Check (v	lon of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the
е.	Check (vidiversio	) the appropriate box to indicate diversion location	
е.	Check (v	) the appropriate box to indicate diversion location	on and indicate whether the
е.	Check (vicesion) Check one	/) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (vicesion) Check one	) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (vicesion) Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Hunting Bayou c. Location of point: In the WP Harris/R Wilson Original Survey No. $\frac{201}{}$ , Abstract No. $\frac{31}{}$ 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: °N, Longitude 95.294696 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): GIS

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

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.

2.

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).

l.	Divers	ion Information (Instructions, Page. $2^{4}$	4)	
a.	This Worksheet is to add new (select 1 of 3 below):			
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Hunting Bayou 1	
b.		n Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)	
c.	If yes, su	s point share a diversion rate with other points?  Share of Diversion for a graches cfs or gpm		
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y/NN	
		crease in diversion rate is considered a new appropon on of Section 1, New or Additional Appropriation o	•	
е.		) the appropriate box to indicate diversion location location is existing or proposed):	n and indicate whether the	
е.	diversion Check		n and indicate whether the  Write: Existing or Proposed	
е.	Check one		Write: Existing or Proposed	
е.	diversion Check	n location is existing or proposed):		
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed	
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Hunting Bayou c. Location of point: In the WP Harris/R Wilson Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{32}{100}$ , Harris 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: °N, Longitude 95.212222 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,

2.

- Mapping Program): GIS

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

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point NoDiversion Point NoUpstream Limit of Diversion Reach NoDownstream Limit of Diversion Reach No.	ns Bayou 1
b.		ım Rate of Diversion for <b>this new point</b> 10 9 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	nis point share a diversion rate with other points?  Submit Maximum Combined Rate of Diversion for a gpm  Cfs or gpm	
d.	For am	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
e.	complex Check (	ncrease in diversion rate is considered a new appropriation of Section 1, New or Additional Appropriation of $\sqrt{}$ ) the appropriate box to indicate diversion location.	of State Water.
		on location is existing or proposed):	
	Check	on location is existing or proposed):	Write: Existing or Proposed
	Check one	Directly from stream	Write: Existing or Proposed  Proposed
	one		
	one	Directly from stream	
	one	Directly from stream From an on-channel reservoir	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the $\frac{TTRRCO}{No.\frac{1023}{1023}}$ , $\frac{Harris}{}$ 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: °N, Longitude 95.476793 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): GIS

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

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.

2.

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).

L.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Sims Bayou 1
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  shall be able to be a continum combined Rate of Diversion for a continuous caches	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation of	•
e.	Check (	) the appropriate box to indicate diversion location	
е.	Check (diversio		
е.	Check (v	) the appropriate box to indicate diversion location	on and indicate whether the
е.	Check (vidiversional Check one	) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	Check (vidiversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
e.	Check (vidiversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the Original Survey No. 201 , Abstract County, Texas. No. 877 Harris 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: °N, Longitude 95.404922 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): GIS

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

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.

2.

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).

1.	Divers	ion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1 2 3	Diversion Point No. Upstream Limit of Diversion Reach No. Sin Downstream Limit of Diversion Reach No	ns Bayou 2
b <b>.</b>		n Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  bmit Maximum Combined Rate of Diversion for a general gener	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropon of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the
е.	diversion Check		on and indicate whether the  Write: Existing or Proposed
е.	diversion		
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
e.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the Original Survey No. 201 , Abstract County, Texas. No. 877 Harris 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: °N, Longitude 95.404922 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): GIS

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

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.

2.

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).

	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Sims Bayou 2
b.		m Rate of Diversion for <b>this new point</b> <sup>419</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	is point share a diversion rate with other points?  "ubmit Maximum Combined Rate of Diversion for a general ge	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? $Y / N N$
		crease in diversion rate is considered a new approp	•
e.	Check (	ion of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):	
е.	Check (diversional Check		
е.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversion Check one	the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou **b.** Zip Code: 77048 c. Location of point: In the HRS A G Holland Original Survey No. 201 , Abstract No. 347 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: °N, Longitude 95.337742 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): GIS

2.

Page. 38.

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

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).

1.	Divers	sion Information (Instructions, Page. $2$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1. 2. × 3.	Diversion Point No. Upstream Limit of Diversion Reach No. Sin Downstream Limit of Diversion Reach No	ns Bayou 3
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  abmit Maximum Combined Rate of Diversion for a general gene	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the
e.	diversion Check		on and indicate whether the  Write: Existing or Proposed
e.	diversio		
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou **b.** Zip Code: 77048 c. Location of point: In the HRS A G Holland Original Survey No. 201 , Abstract No. 347 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: °N, Longitude 95.337742 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): GIS

2.

Page. 38.

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

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	o. Sims Bayou 3
b.		ım Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
C.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reaches	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
	comple	ncrease in diversion rate is considered a new appropriation of Section 1, New or Additional Appropriation of	of State Water.
e.	diversio	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
	Check		
			Write: Existing or Proposed
	one X	Directly from stream	Write: Existing or Proposed  Proposed
	one		
	one	Directly from stream	
	one	Directly from stream From an on-channel reservoir	

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.256988 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,

2.

- f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.
- g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

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).

l.	Divers	sion Information (Instructions, Page. $2^{4}$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point NoDiversion Point NoDownstream Limit of Diversion Reach No.	ns Bayou 4
b.		m Rate of Diversion for <b>this new point</b> 63.1 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  abmit Maximum Combined Rate of Diversion for a general gene	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y/NN
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
е.	diversio Check		on and indicate whether the  Write: Existing or Proposed
e.	diversio		
e.	Check one	n location is existing or proposed):	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.256988 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,

2.

- f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.
- g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

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).

1.	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Sims Bayou 4
b <b>.</b>		m Rate of Diversion for <b>this new point</b> 63.1 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a eachescfs orgpm	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new approp	•
		ion of Section 1, New or Additional Appropriation o	
e.	Check (1	√) the appropriate box to indicate diversion location	
e.	Check (diversional Check		
e.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the
е.	Check (ndiversional Check one	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (ndiversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (ndiversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.285699 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): GIS

2.

Page. 38.

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

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).

	Divers	ion Information (Instructions, Page. 2	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point No. Upstream Limit of Diversion Reach No. Sin Downstream Limit of Diversion Reach No	ns Bayou 5
b.		n Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  Share of Diversion for a general ge	
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropon on of Section 1, New or Additional Appropriation of	•
e.	Check (\	) the appropriate box to indicate diversion location location	
е.	Check (v	) the appropriate box to indicate diversion location	
е.	Check (v	) the appropriate box to indicate diversion location	on and indicate whether the
e.	Check (v diversional Check one	) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	Check (v diversional Check one	) the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (v diversional Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

#### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.285699 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): GIS

2.

Page. 38.

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

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Sims Bayou 5
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	is point share a diversion rate with other points? ubmit Maximum Combined Rate of Diversion for a reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y/NN
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
e.	Check (	<ul> <li>the appropriate box to indicate diversion location location is existing or proposed):</li> </ul>	on and indicate whether the
е.	diversion Check	√) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
е.	diversio	v) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	
е.	Check one	on location is existing or proposed):	Write: Existing or Proposed
е.	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed
е.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.258805 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,

2.

Page. 38.

- Mapping Program): GIS

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

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).

l.	Divers	sion Information (Instructions, Page. $24$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	1. 2. ×	Diversion Point NoDiversion Point NoDownstream Limit of Diversion Reach NoDownstream Limit of Diversion Reach No.	ns Bayou 6
b.	Maximu or_ <sup>89,441</sup>	m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	is point share a diversion rate with other points?  Submit Maximum Combined Rate of Diversion for a seachesgpm	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
е.		<ul> <li>the appropriate box to indicate diversion location location</li> <li>location is existing or proposed):</li> </ul>	n and indicate whether the
е.	diversio Check		n and indicate whether the  Write: Existing or Proposed
e.	diversio		Write: Existing or Proposed
e.	Check one	n location is existing or proposed):	
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.258805 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,

2.

Page. 38.

- Mapping Program): GIS

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

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).

1.	Diver	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	2	Diversion Point No. Upstream Limit of Diversion Reach No. Downstream Limit of Diversion Reach No	. Sims Bayou 6
b <b>.</b>		ım Rate of Diversion for <b>this new point</b> 1993 gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, s	is point share a diversion rate with other points?  ubmit Maximum Combined Rate of Diversion for a  reachescfs orgpm	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$
		ncrease in diversion rate is considered a new approption of Section 1, New or Additional Appropriation o	•
e.	Check (	$\sqrt{\ }$ ) the appropriate box to indicate diversion location	on and indicate whether the
	uiveisi	on location is existing or proposed):	
	Check	on location is existing or proposed):	Write: Existing or Proposed
		Directly from stream	
	Check one	on location is existing or proposed):	Write: Existing or Proposed
	Check one	on location is existing or proposed):  Directly from stream	Write: Existing or Proposed
	Check one	on location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): Sims Bayou c. Location of point: In the MA Calliban/A Vince Original Survey No. 201 , Abstract \_\_\_\_\_County, Texas. No. 9 Harris 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: °N, Longitude 95.241957 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,

2.

- f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.
- g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

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).

	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point No. Upstream Limit of Diversion Reach No. Wh Downstream Limit of Diversion Reach No	nite Oak Bayou 1
b.		m Rate of Diversion for <b>this new point</b> <sup>6.19</sup> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, st	is point share a diversion rate with other points?  "ubmit Maximum Combined Rate of Diversion for a general ge	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb{N}$
		crease in diversion rate is considered a new approp	•
e.	Check (	ion of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location is existing or proposed):	
e.	Check (diversional Check	√) the appropriate box to indicate diversion location	
е.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversion Check one	the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou c. Location of point: In the Slewis Original Survey No. 201 , Abstract No. 510 \_\_\_\_\_, Harris 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: °N, Longitude 95.496077 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,

2.

- f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.
- g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

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).

1.	Divers	sion Information (Instructions, Page. $2^{4}$	4)
a.	This Wo	rksheet is to add new (select 1 of 3 below):	
	2	Diversion Point NoDiversion Reach NoDownstream Limit of Diversion Reach No	. White Oak Bayou 1
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, su	s point share a diversion rate with other points?  abmit Maximum Combined Rate of Diversion for a general gene	
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$
		crease in diversion rate is considered a new appropion of Section 1, New or Additional Appropriation o	•
е.		) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the
е.	diversio Check		on and indicate whether the  Write: Existing or Proposed
e.	Check one		Write: Existing or Proposed
e.	diversio Check	n location is existing or proposed):	
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed
e.	Check one	n location is existing or proposed):  Directly from stream  From an on-channel reservoir	Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou c. Location of point: In the SMC Clelland Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{544}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , Abstract 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: °N, Longitude 95.480177 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): GIS

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

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.

2.

Page. 38.

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).

	Divers	sion Information (Instructions, Page. 2	4)
a.	This Wo	orksheet is to add new (select 1 of 3 below):	
	1 2. × 3	Diversion Point No. Upstream Limit of Diversion Reach No. Wh Downstream Limit of Diversion Reach No	nite Oak Bayou 2
b.		m Rate of Diversion for <b>this new point</b> gpm (gallons per minute)	_ cfs (cubic feet per second)
c.	If yes, st	is point share a diversion rate with other points?  "ubmit Maximum Combined Rate of Diversion for a general ge	
d.	For ame	endments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb{N}$
		crease in diversion rate is considered a new approp	•
e.	Check (	ion of Section 1, New or Additional Appropriation of the appropriate box to indicate diversion location location location location is existing or proposed):	
e.	Check (diversional Check	√) the appropriate box to indicate diversion location	
е.	Check (	√) the appropriate box to indicate diversion location	on and indicate whether the
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed
e.	Check (diversion Check one	√) the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed
е.	Check (diversion Check one	the appropriate box to indicate diversion location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou c. Location of point: In the SMC Clelland Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{544}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , $\frac{1}{100}$ , Abstract 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: °N, Longitude 95.480177 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): GIS

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

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.

2.

Page. 38.

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).

L.	Diversion Information (Instructions, Page. 24)				
a.	a. This Worksheet is to add new (select 1 of 3 below):				
	<ol> <li>Diversion Point No.</li> <li>Diversion Point No.</li> <li>Upstream Limit of Diversion Reach No.</li> <li>Downstream Limit of Diversion Reach No. White Oak Bayou 2</li> </ol>				
b. Maximum Rate of Diversion for <b>this new point</b> or 15,278 gpm (gallons per minute)  cfs (cubic feet per or 15,278 gpm (gallons per minute)					
c.	<ul> <li>Does this point share a diversion rate with other points? Y / N N</li> <li>If yes, submit Maximum Combined Rate of Diversion for all points/reachescfs orgpm</li> </ul>				
d.	For ame	ndments, is Applicant seeking to increase combine	ed diversion rate? Y / N $\mathbb N$		
	<ul> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>e. Check (√) the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):</li> </ul>				
e.		) the appropriate box to indicate diversion location location location is existing or proposed):	n and indicate whether the		
е.	diversion Check		on and indicate whether the  Write: Existing or Proposed		
е.	Check one		Write: Existing or Proposed		
е.	diversion Check	n location is existing or proposed):			
е.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed		
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed		

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou c. Location of point: In the DHenson Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{328}{100}$ , $\frac{1}{100}$ , $\frac{1}{10$ 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: °N, Longitude 95.456004 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): GIS

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

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.

2.

Page. 38.

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).

1.	Diversion Information (Instructions, Page. 24)				
a.	This Worksheet is to add new (select 1 of 3 below):				
	1Diversion Point No. 2. × Upstream Limit of Diversion Reach No. White Oak Bayou 3 3Downstream Limit of Diversion Reach No.				
b <b>.</b>	Maximum Rate of Diversion for <b>this new point</b> cfs (cubic feet per second) or 15,969 gpm (gallons per minute)				
c.	If yes, su	s point share a diversion rate with other points?  Submit Maximum Combined Rate of Diversion for all beachesgpm			
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$		
	** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.  • Check (√) the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):				
е.		) the appropriate box to indicate diversion location location is existing or proposed):	on and indicate whether the		
е.	diversion Check		on and indicate whether the  Write: Existing or Proposed		
е.	diversio				
е.	Check one	n location is existing or proposed):	Write: Existing or Proposed		
e.	Check one	n location is existing or proposed):  Directly from stream	Write: Existing or Proposed		
е.	Check one	Directly from stream From an on-channel reservoir	Write: Existing or Proposed		

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou c. Location of point: In the DHenson Original Survey No. $\frac{201}{100}$ , Abstract No. $\frac{328}{100}$ , $\frac{1}{100}$ , $\frac{1}{10$ 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: °N, Longitude 95.456004 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): GIS

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

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.

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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).

L.	Diversion Information (Instructions, Page. 24)				
a.	a. This Worksheet is to add new (select 1 of 3 below):				
	<ol> <li>Diversion Point No.</li> <li>Diversion Point No.</li> <li>Downstream Limit of Diversion Reach No.</li> <li>Downstream Limit of Diversion Reach No. White Oak Bayou 3</li> </ol>				
b.	_ cfs (cubic feet per second)				
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/reachescfs orgpm				
d.	For ame	ndments, is Applicant seeking to increase combin	ed diversion rate? Y / N $\mathbb N$		
	<ul> <li>** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.</li> <li>e. Check (√) the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):</li> </ul>				
e.	Check (				
e.	Check (v	) the appropriate box to indicate diversion location			
е.	Check (v	) the appropriate box to indicate diversion location	on and indicate whether the		
e.	Check (v diversio Check one	) the appropriate box to indicate diversion location location location is existing or proposed):	on and indicate whether the  Write: Existing or Proposed		
е.	Check (v diversio Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream	on and indicate whether the  Write: Existing or Proposed		
е.	Check (v diversio Check one	the appropriate box to indicate diversion location location location is existing or proposed):  Directly from stream  From an on-channel reservoir	on and indicate whether the  Write: Existing or Proposed		

### Diversion Location (Instructions, Page 25) a. On watercourse (USGS name): White Oak Bayou **b.** Zip Code: \_\_\_\_\_\_\_ c. Location of point: In the Ausin Original Survey No. 201 , Abstract County, Texas. No. 1 Harris 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: °N, Longitude 95.358471 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,

2.

- e. Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS Mapping Program):
- f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 38.
- g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

## WORKSHEET 4.0 DISCHARGE INFORMATION

Not Applicable

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					
b.	Provide the amount of water that will be lost to transportation, evaporation, seepage, channe or other associated carriage losses					
	Is the source of the discharged water return flows? $  Y  /  N $ If yes, provide the following information:					
	1. The TPDES Permit Number(s) (attach a copy of the current TPDES permit(s))					
	2. Applicant is the owner/holder of each TPDES permit listed above? Y/N					
su ap	EASE NOTE: If Applicant is not the discharger of the return flows, the application should be bmitted under Section 1, New or Additional Appropriation of State Water, as a request for a new opropriation of state water. If Applicant is the discharger, then the application should be bmitted 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, surface water?					
	5. If any percentage is surface water, provide the base water right number(s)					
C.	Is the source of the water being discharged groundwater? Y / N $$ If yes, provide the following information:					
	1. Source aquifer(s) from which water will be pumped:					
	2. Any 24 hour pump test for the well if one has been conducted. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See <a href="http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp">http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp</a> . Additionally, provide well numbers or identifiers					
	3. Indicate how the groundwater will be conveyed to the stream or reservoir.					
	4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.					
ci.	Is the source of the water being discharged a surface water supply contract? Y / N If yes, provide the signed contract(s).					
cii.	. Identify any other source of the water					

#### Not Applicable

## 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.** 

a.	The amount of water that will be discharged at this point isac per year. The discharged amount should include the amount needed for use and compensate for any losses.	re-feet to
b.	Water will be discharged at this point at a maximum rate ofcfs or	gpm.
c.	Name of Watercourse as shown on Official USGS maps:	
d.	Zip Code:	
f.	Location of point: In theOriginal Survey No, Abstract No, County, Texas.	
g.	Point is at:	
	Latitude°N, Longitude°W.	
	*Provide Latitude and Longitude coordinates in decimal degrees to at least six places	decimal
h.	Indicate the method used to calculate the discharge point location (examples: Ha GPS Device, GIS, Mapping Program):	

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

TCEQ-10214C (07/19/2017) Water Rights Permitting Availability Technical Information Sheet

## WORKSHEET 5.0 ENVIRONMENTAL INFORMATION

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach Brays Bayou 1, Upstream Boundary

a. Identify the appropriate description of the water body.

b.

C.

■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
□ Other, specify:
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:
Waterbody aesthetics

Check one of the following that best describes the aesthetics of the stream segments

affected by the application and the area surrounding those stream segments.

□ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
□ Natural Area: trees and/or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored
Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
□ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

#### d. Waterbody Recreational Uses

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

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

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
ć	a.	Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested

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

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

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

#### **WORKSHEET 5.0** ENVIRONMENTAL INFORMATION

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

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

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

Location: Diversion Reach Brays Bayou 1, Downstream Boundary and Diversion Reach Brays Bayou 2, Upstream Boundary a Identify the appropriate description of the water body

a. Identity 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
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  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the alte	rnate source is treated return flows, provide the TPDES permit number
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Chloride,					
mg/L					
Total					
Dissolved					
Solids, mg/L					
pH, standard					
units					
Temperature*,					
degrees					
Celsius					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

Location: Diversion Reach Brays Bayou 2, Downstream Boundary and Diversion Reach Brays Bayou 3, Upstream Boundary

a. Identify the appropriate description of the water body.
■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
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b. Flow characteristics
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Location: Diversion Reach Brays Bayou 3, Downstream Boundary

a. Identify the appropriate description of the water body.

b.

C.

■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
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Flow characteristics
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TCEQ-10214C (07/19/2017) Water Rights Permitting Availability Technical Information Sheet

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Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location). Location: Diversion Reach Greens Bayou 1, Upstream Boundary

a. Identify the appropriate description of the water body.

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Description of the Water Body at each Diversion Point or Dam Location. (Provide an

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  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
ć	a.	Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested

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

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

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 4, Downstream Boundary and Diversion Reach Greens Bayou 5, Upstream Boundary

Location: Diversion Reach Greens Bayou 4, Downstream Boundary and Diversion Reach Greens Bayou 5, Upstream Boundary and Diversion Reach Greens Bayou 6, Upstream Boundary Bayou 6, Upstream Boundary Bayou 6, Upstream Boundary Bayou 7, Upstream Boundary 8, Upstream Boundary 8

i. Identity the appropriate description of the water body.
■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
□ Other, specify:
. 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
$\square$ Historical observation by adjacent landowners
☐ Personal observation
□ Other, specify:
. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
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a.	Reasonably current water chemistry information including but not limited to the
	following parameters in the table below. Additional parameters may be requested
	if there is a specific water quality concern associated with the aquifer from which
	water is withdrawn. If data for onsite wells are unavailable; historical data collected
	from similar sized wells drawing water from the same aquifer may be provided.
	However, onsite data may still be required when it becomes available. Provide the
	well number or well identifier. Complete the information below for each well and
	provide the Well Number or identifier.

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

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an

Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 5, Downstream Boundary and Diversion Reach Greens Bayou 6, Upstream Boundary

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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
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## 2. Alternate Sources of Water and/or Bed and Banks Applications

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
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	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
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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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

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

Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 6, Downstream Boundary and Diversion Reach Greens Bayou 7, Upstream Boundary

a. Iden	tify the appropriate description of the water body.
	■ Stream
	□ Reservoir
	Average depth of the entire water body, in feet:
	□ Other, specify:
b. Flov	v 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. Wate	erbody aesthetics

Check one of the following that best describes the aesthetics of the 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
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	from similar sized wells drawing water from the same aquifer may be provided.
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	well number or well identifier. Complete the information below for each well and
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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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 7, Downstream Boundary and Diversion Reach Greens Bayou 8, Upstream Boundary

b.

C.

Location: Diversion Reach Greens Bayou 7, Downstream Boundary and Diversion Reach Greens Bayou 8, Upstream Boundary a. Identify the appropriate description of the water body.

Check one of the following that best describes the aesthetics of the 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
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- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
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	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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 8, Downstream Boundary and Diversion Reach Greens Bayou 9, Upstream Boundary

Location: Diversion Reach Greens Bayou 8, Downstream Boundary and Diversion Reach Greens Bayou 9, Upstream Boundary a. Identify the appropriate description of the water body.

arizonal, are 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
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  - i. A brief description of the area that will be inundated by the reservoir.
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  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
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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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

b.	If groundwater will be used, provide the depth of the well	and the name
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This worksheet is required for new appropriations of water in the Canadian, Red. Sulphur, and Cypress Creek Basins. The worksheet is also required in all basins for: requests to change a diversion point, applications using an alternate source of water, and bed and banks applications. Instructions, Page 28.

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an

Environmental Information Sheet for each location),
Location: Diversion Reach Greens Bayou 9, Downstream Boundary and Diversion Reach Greens Bayou 10, Upstream Boundary a. Identify the appropriate description of the water body.

<b>■</b> 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 one of the following that best characterize the area downstream of the diversione).	
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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
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  - i. A brief description of the area that will be inundated by the reservoir.
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# 2. Alternate Sources of Water and/or Bed and Banks Applications

For all bed and banks applications:

Not Applicable

b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the alte	rnate source is treated return flows, provide the TPDES permit number
_	vater is the alternate source, or groundwater or other surface water will be discharged ercourse provide:
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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					
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Temperature*,					
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Celsius					

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location), Location: Diversion Reach Greens Bayou 10, Downstream Boundary

b.

a. Iden	tify the appropriate description of the water body.
	■ Stream
	□ Reservoir
	Average depth of the entire water body, in feet:
	□ Other, specify:
b. Flov	v 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. Wat	erbody 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
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  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the alte	rnate source is treated return flows, provide the TPDES permit number
_	vater is the alternate source, or groundwater or other surface water will be discharged ercourse provide:
a.	Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested

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	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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

b.	If groundwater will be used, provide the depth of the well	and the name
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This worksheet is required for new appropriations of water in the Canadian, Red, Sulphur, and Cypress Creek Basins. The worksheet is also required in all basins for: requests to change a diversion point, applications using an alternate source of water, and bed and banks applications. Instructions, Page 28.

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location), Location: Diversion Reach Hunting Bayou 1, Upstream Boundary

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
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Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location), Location: Diversion Reach Hunting Bayou 1, Downstream Boundary

b.

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
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Chloride,					
mg/L					
Total					
Dissolved					
Solids, mg/L					
pH, standard					
units					
Temperature*,					
degrees					
Celsius					

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location). Location: Diversion Reach Sims Bayou 1, Upstream Boundary

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).
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TCEQ-10214C (07/19/2017) Water Rights Permitting Availability Technical Information Sheet

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

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l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
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#### New Appropriations of Water (Canadian, Red, Sulphur, and Cypress 1. Creek Basins only) and Changes in Diversion Point(s)

Description of the Water Body at each Diversion Point or Dam Location. (Provide an

Environmental Information Sheet for each location),
Location: Diversion Reach Sims Bayou 1, Downstream Boundary and Diversion Reach Sims Bayou 2, Upstream Boundary

a. Ider	tify the appropriate description of the water body.
	■ Stream
	□ Reservoir
	Average depth of the entire water body, in feet:
	□ Other, specify:
b. Flov	v 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).
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c. Wat	erbody aesthetics

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Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach Sims Bayou 2, Downstream Boundary and Diversion Reach Sims Bayou 3, Upstream Boundary

a. Identify the appropriate description of the water body.
■ Stream
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Average depth of the entire water body, in feet:
□ Other, specify:
b. Flow characteristics
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Description of the Water Body at each Diversion Point or Dam Location. (Provide an

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	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					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

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

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

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

Location: Diversion Reach Sims Bayou 4, Downstream Boundary and Diversion Reach Sims Bayou 5, Upstream Boundary

a. Ider	itify the appropriate description of the water body.
	■ Stream
	□ Reservoir
	Average depth of the entire water body, in feet:
	□ Other, specify:
b. Flov	w 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
	$\square$ Historical observation by adjacent landowners
	☐ Personal observation
	□ Other, specify:
c. Wat	erbody 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

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

- ☐ Primary contact recreation (swimming or direct contact with water)
- ☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)
- Non-contact recreation

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

- Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the map submitted with the application indicating the location of the photograph and the direction of the shot.
- 2. Measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on the new diversion structure).
- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

l	b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the a	lterna	ate source is treated return flows, provide the TPDES permit number
		ter is the alternate source, or groundwater or other surface water will be discharged course provide:
ć	a.	Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested

a.	Reasonably current water chemistry information including but not limited to the
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	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.
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	well number or well identifier. Complete the information below for each well and
	provide the Well Number or identifier.

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Chloride,					
mg/L					
Total					
Dissolved					
Solids, mg/L					
pH, standard					
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Temperature*,					
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Celsius					

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b.	If groundwater will be used, provide the depth of the well	and the name
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#### New Appropriations of Water (Canadian, Red, Sulphur, and Cypress 1. Creek Basins only) and Changes in Diversion Point(s)

Description of the Water Body at each Diversion Point or Dam Location. (Provide an

Environmental Information Sheet for each location),
Location: Diversion Reach Sims Bayou 5, Downstream Boundary and Diversion Reach Sims Bayou 6, Upstream Boundary

a. Identify the appropriate description of the water body.
<b>■</b> 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.
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$\square$ 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
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Dissolved					
Solids, mg/L					
pH, standard					
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Temperature*,					
degrees					
Celsius					

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

b.	If groundwater will be used, provide the depth of the well	and the name
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#### New Appropriations of Water (Canadian, Red, Sulphur, and Cypress 1. Creek Basins only) and Changes in Diversion Point(s)

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location), Location: Diversion Reach Sims Bayou 6, Downstream Boundary

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach White Oak Bayou 1, Upstream Boundary

a. Identify the appropriate description of the water body.

b.

C.

■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
□ Other, specify:
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
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■ USGS flow records
☐ Historical observation by adjacent landowners
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Waterbody aesthetics

Check one of the following that best describes the aesthetics of the stream segments

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TCEQ-10214C (07/19/2017) Water Rights Permitting Availability Technical Information Sheet

□ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
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# 2. Alternate Sources of Water and/or Bed and Banks Applications

For all bed and banks applications:

Not Applicable

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Parameter	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Sulfate, mg/L					,
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mg/L					
Total					
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Solids, mg/L					
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Temperature*,					
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b.	If groundwater will be used, provide the depth of the well	and the name
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This worksheet is required for new appropriations of water in the Canadian, Red, Sulphur, and Cypress Creek Basins. The worksheet is also required in all basins for: requests to change a diversion point, applications using an alternate source of water, and bed and banks applications. Instructions, Page 28.

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an

Environmental Information Sheet for each location),
Location: Diversion Reach White Oak Bayou 1, Downstream Boundary and Diversion Reach White Oak Bayou 2, Upstream Boundary a Identify the appropriate description of the water body

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

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

For all bed and banks applications:

Not Applicable

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

b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.
If the alte	rnate source is treated return flows, provide the TPDES permit number
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Chloride,					
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## **WORKSHEET 5.0** ENVIRONMENTAL INFORMATION

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

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach White Oak Bayou 2, Downstream Boundary and Diversion Reach White Oak Bayou 3, Upstream Boundary

a. Identify the appropriate description of the water body.

C.

b.

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.

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Solids, mg/L					
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# WORKSHEET 5.0 ENVIRONMENTAL INFORMATION

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

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),
Location: Diversion Reach White Oak Bayou 3, Downstream Boundary

a. Identify the appropriate description of the water body.

b.

C.

■ Stream
□ Reservoir
Average depth of the entire water body, in feet:
☐ Other, specify:
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).
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- 3. If the application includes a proposed reservoir, also include:
  - i. A brief description of the area that will be inundated by the reservoir.
  - ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.
  - iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

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

For all bed and banks applications:

Not Applicable

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

b.	An assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements.		
If the alte	rnate source is treated return flows, provide the TPDES permit number		
If groundwater is the alternate source, or groundwater or other surface water will be discharged into a watercourse provide:			
a.	Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested		

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

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

<sup>\*</sup> Temperature must be measured onsite at the time the groundwater sample is collected.

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

## 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 512-239-4691, or e-mail wras@tceq.texas.gov. The model plans can also be downloaded from the TCEQ webpage. **Please** use the most up-to-date plan documents available on the webpage.

## 1. Water Conservation Plans

- a. The following applications must include a completed Water Conservation Plan (30 TAC § 295.9) for each use specified in 30 TAC, Chapter 288 (municipal, industrial or mining, agriculture including irrigation, wholesale):
  - 1. Request for a new appropriation or use of State Water.
  - 2. Request to amend water right to increase appropriation of State Water.
  - 3. Request to amend water right to extend a term.
  - 4. Request to amend water right to change a place of use. \*does not apply to a request to expand irrigation acreage to adjacent tracts.
  - 5. Request to amend water right to change the purpose of use. \*applicant need only address new uses.
  - 6. Request for bed and banks under TWC § 11.042(c), when the source water is State Water

\*including return flows, contract water, or other State Water.

b.	If Applicant is requesting any authorization in section (1)(a) above, indicate each use for which Applicant is submitting a Water Conservation Plan as an attachment:
	1Municipal Use. See 30 TAC § 288.2. **
	2 Industrial or Mining Use. See 30 TAC § 288.3.

3. \_\_\_\_Agricultural Use, including irrigation. See 30 TAC § 288.4.

4. \_\_\_\_\_Wholesale Water Suppliers. See 30 TAC § 288.5. \*\*

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

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

appropriation; and evaluates any other feasible alternative to new water development. See 30 TAC  $\S$  288.7.

Applicant has included this information in each applicable plan? Y / N

# 2. Drought Contingency Plans

etc. See 30 TAC § 288.30) Y / N

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:			
	1Municipal Uses by public water suppliers. See 30 TAC § 288.20.			
	2Irrigation Use/ Irrigation water suppliers. See 30 TAC § 288.21.			
	3Wholesale 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 ( <i>ordinance, resolution, or tariff,</i>			

# WORKSHEET 7.0 ACCOUNTING PLAN INFORMATION WORKSHEET

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

## 1. Is Accounting Plan Required

Accounting Plans are generally required:

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

## 2. Accounting Plan Requirements

- a. A **text file** that includes:
  - 1. an introduction explaining the water rights and what they authorize;
  - 2. an explanation of the fields in the accounting plan spreadsheet including how they are calculated and the source of the data;
  - 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 (\$)
	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>	
Filing Fee	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. **	
	Required for all Use Types, excluding Irrigation Use.	
Use Fee	Multiply \$1.00 x Maximum annual diversion of State Water in acrefeet. **	
Recreational Storage	Only for those with Recreational Storage.	
Fee Fee	Multiply $1.00 \ x$ acre-feet of in-place Recreational Use State Water to be stored at normal max operating level.	
	Only for those with Storage, excluding Recreational Storage.	
Storage Fee	Multiply 50¢ x $\_\_\_$ acre-feet of State Water to be stored at normal max operating level.	
Mailed Notice	Cost of mailed notice to all water rights in the basin. Contact Staff to determine the amount (512) 239-4691.	
	TOTAL	\$

### 2. AMENDMENT OR SEVER AND COMBINE

	Description	Amount (\$)
Filing Foo	Amendment: \$100	\$100.00
Filing Fee	<b>OR</b> Sever and Combine: \$100 xof water rights to combine	
Recording Fee		\$12.50
Mailed Notice	Mailed Notice Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	\$ 112.50

### 3. BED AND BANKS

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

# Addendum Regarding the State and Regional Water Plans.

See 2016 Regional Water Plan at Section 3.6.7, 5.4.1, 5.5.4, and Appendix 5-B-REUS-002-1 to 5-B-REUS-002-16.

# Addendum to Worksheet 5.0

Map Number 1: Upstream Limit for Diversion Reach Brays Bayou #1 looking upstream.



Map Number 2: Upstream Limit for Diversion Reach Brays Bayou #1 looking downstream.



Map Number 3: Downstream Limit for Diversion Reach Brays Bayou #1 and Upstream Limit for Diversion Reach Brays Bayou #2 looking upstream.



Map Number 4: Downstream Limit for Diversion Reach Brays Bayou #1 and Upstream Limit for Diversion Reach Brays Bayou #2 looking downstream.



Map Number 5: Downstream Limit for Diversion Reach Brays Bayou #2 and Upstream Limit for Diversion Reach Brays Bayou #3 looking upstream.



Map Number 6: Downstream Limit for Diversion Reach Brays Bayou #2 and Upstream Limit for Diversion Reach Brays Bayou #3 looking downstream.



Map Number 7: Downstream Limit for Diversion Reach Brays Bayou #3 looking upstream.



Map Number 8: Downstream Limit for Diversion Reach Brays Bayou #3 looking downstream.



Map Number 9: Upstream Limit for Diversion Reach Greens Bayou #1 looking upstream.



Map Number 10: Upstream Limit for Diversion Reach Greens Bayou #1 looking downstream.



Map Number 11: Downstream Limit for Diversion Reach Greens Bayou #1 and Upstream Limit for Diversion Reach Greens Bayou #2 looking upstream.



Map Number 12: Downstream Limit for Diversion Reach Greens Bayou #1 and Upstream Limit for Diversion Reach Greens Bayou #2 looking downstream.



Map Number 13: Downstream Limit for Diversion Reach Greens Bayou #2 and Upstream Limit for Diversion Reach Greens Bayou #3 looking upstream.



Map Number 14: Downstream Limit for Diversion Reach Greens Bayou #2 and Upstream Limit for Diversion Reach Greens Bayou #3 looking downstream.



Map Number 15: Downstream Limit for Diversion Reach Greens Bayou #3 and Upstream Limit for Diversion Reach Greens Bayou #4 looking upstream.



Map Number 16: Downstream Limit for Diversion Reach Greens Bayou #3 and Upstream Limit for Diversion Reach Greens Bayou #4 looking downstream.



Map Number 17: Downstream Limit for Diversion Reach Greens Bayou #4 and Upstream Limit for Diversion Reach Greens Bayou #5 looking upstream.



Map Number 18: Downstream Limit for Diversion Reach Greens Bayou #4 and Upstream Limit for Diversion Reach Greens Bayou #5 looking downstream.



Map Number 19: Downstream Limit for Diversion Reach Greens Bayou #5 and Upstream Limit for Diversion Reach Greens Bayou #6 looking upstream.



Map Number 20: Downstream Limit for Diversion Reach Greens Bayou #5 and Upstream Limit for Diversion Reach Greens Bayou #6 looking downstream.



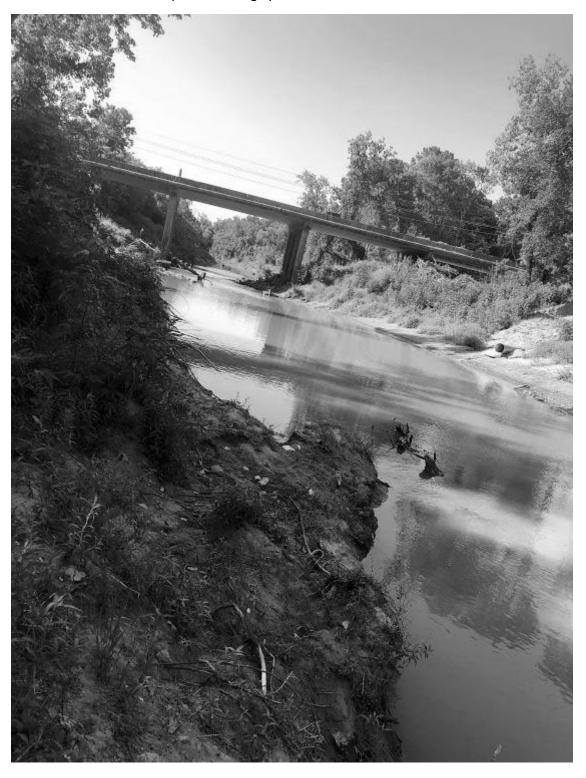
Map Number 21: Downstream Limit for Diversion Reach Greens Bayou #6 and Upstream Limit for Diversion Reach Greens Bayou #7 looking upstream.



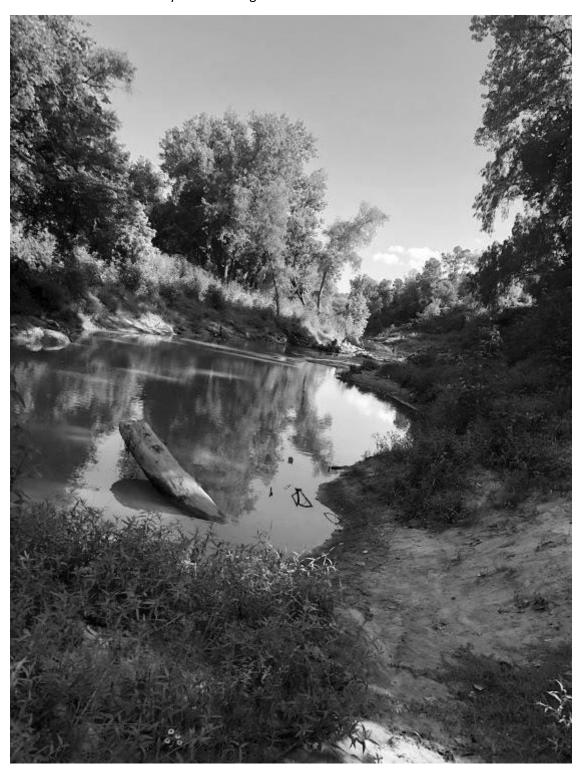
Map Number 22: Downstream Limit for Diversion Reach Greens Bayou #6 and Upstream Limit for Diversion Reach Greens Bayou #7 looking downstream.



Map Number 23: Downstream Limit for Diversion Reach Greens Bayou #7 and Upstream Limit for Diversion Reach Greens Bayou #8 looking upstream.



Map Number 24: Downstream Limit for Diversion Reach Greens Bayou #7 and Upstream Limit for Diversion Reach Greens Bayou #8 looking downstream.



Map Number 25: Downstream Limit for Diversion Reach Greens Bayou #8 and Upstream Limit for Diversion Reach Greens Bayou #9 looking upstream.



Map Number 26: Downstream Limit for Diversion Reach Greens Bayou #8 and Upstream Limit for Diversion Reach Greens Bayou #9 looking downstream.



Map Number 27: Downstream Limit for Diversion Reach Greens Bayou #9 and Upstream Limit for Diversion Reach Greens Bayou #10 looking upstream.



Map Number 28: Downstream Limit for Diversion Reach Greens Bayou #9 and Upstream Limit for Diversion Reach Greens Bayou #10 looking downstream.



Map Number 29: Downstream Limit for Diversion Reach Greens Bayou #10 looking upstream.



Map Number 30: Downstream Limit for Diversion Reach Greens Bayou #10 looking downstream.



Map Number 31: Upstream Limit for Diversion Reach Hunting Bayou #1 looking upstream.



Map Number 32: Upstream Limit for Diversion Reach Hunting Bayou #1 looking downstream.



Map Number 33: Downstream Limit for Diversion Reach Hunting Bayou #1 looking upstream.



Map Number 34: Downstream Limit for Diversion Reach Hunting Bayou #1 looking downstream.



Map Number 35: Upstream Limit for Diversion Reach Sims Bayou #1 looking upstream.



Map Number 36: Upstream Limit for Diversion Reach Sims Bayou #1 looking downstream.



Map Number 37: Downstream Limit for Diversion Reach Sims Bayou #1 and Upstream Limit for Diversion Reach Sims Bayou #2 looking upstream.



Map Number 38: Downstream Limit for Diversion Reach Sims Bayou #1 and Upstream Limit for Diversion Reach Sims Bayou #2 looking downstream.



Map Number 39: Downstream Limit for Diversion Reach Sims Bayou #2 and Upstream Limit for Diversion Reach Sims Bayou #3 looking upstream.



Map Number 40: Downstream Limit for Diversion Reach Sims Bayou #2 and Upstream Limit for Diversion Reach Sims Bayou #3 looking downstream.



Map Number 41: Downstream Limit for Diversion Reach Sims Bayou #3 and Upstream Limit for Diversion Reach Sims Bayou #4 looking upstream.



Map Number 42: Downstream Limit for Diversion Reach Sims Bayou #3 and Upstream Limit for Diversion Reach Sims Bayou #4 looking downstream.



Map Number 43: Downstream Limit for Diversion Reach Sims Bayou #4 and Upstream Limit for Diversion Reach Sims Bayou #5 looking upstream.



Map Number 44: Downstream Limit for Diversion Reach Sims Bayou #4 and Upstream Limit for Diversion Reach Sims Bayou #5 looking downstream.



Map Number 45: Downstream Limit for Diversion Reach Sims Bayou #5 and Upstream Limit for Diversion Reach Sims Bayou #6 looking upstream.



Map Number 46: Downstream Limit for Diversion Reach Sims Bayou #5 and Upstream Limit for Diversion Reach Sims Bayou #6 looking downstream.



Map Number 47: Downstream Limit for Diversion Reach Sims Bayou #6 looking upstream.



Map Number 48: Downstream Limit for Diversion Reach Sims Bayou #6 looking downstream.



Map Number 49: Upstream Limit for Diversion Reach White Oak Bayou #1 looking upstream.



Map Number 50: Upstream Limit for Diversion Reach White Oak Bayou #1 looking downstream.



Map Number 51: Downstream Limit for Diversion Reach White Oak Bayou #1 and Upstream Limit for Diversion Reach White Oak Bayou #2 looking upstream.



Map Number 52: Downstream Limit for Diversion Reach White Oak Bayou #1 and Upstream Limit for Diversion Reach White Oak Bayou #2 looking downstream.



Map Number 53: Downstream Limit for Diversion Reach White Oak Bayou #2 and Upstream Limit for Diversion Reach White Oak Bayou #3 looking upstream picture 1.



Map Number 54: Downstream Limit for Diversion Reach White Oak Bayou #2 and Upstream Limit for Diversion Reach White Oak Bayou #3 looking upstream picture 2.



Map Number 55: Downstream Limit for Diversion Reach White Oak Bayou #2 and Upstream Limit for Diversion Reach White Oak Bayou #3 looking downstream.



Map Number 56: Downstream Limit for Diversion Reach White Oak Bayou #3 looking upstream.



Map Number 57: Downstream Limit for Diversion Reach White Oak Bayou #3 looking downstream.



## Measures the applicant will take to avoid impingement and entrainment of aquatic organisms.

New diversion structures constructed within the requested diversion reaches will be designed and constructed with screens and low intake velocity intakes to avoid impingement and entrainment of aquatic organisims.

