

TCEQ Interoffice Memorandum

To: Chief Clerk

Thru: Iliana Delgado, Team Leader
Water Rights Permitting Team

From: Tracie Donnelly, Project Manager
Water Rights Permitting Team

Date: March 25, 2011

Subject: Fort Bend County W.C.I.D. No. 1
Docket # 2011-0050-WR
ADJ 5170
CN600740856, RN103182275, RN103186250, RN103191706,
RN103191730, RN103191763, RN103191805, RN103191862,
RN103191912
Application No. 11-5170A to Amend Certificate of Adjudication No. 11-5170
Texas Water Code §§ 11.122, 11.085, Requiring Mailed and Published
Notice
Jones Creek and Oyster Creek, San Jacinto-Brazos Coastal Basin and
Brazos River Basin
Fort Bend County

The Executive Director received an application from Fort Bend County W.C.I.D. No. 1 seeking to amend Certificate of Adjudication No. 11-5170A pursuant to Texas Water Code §§11.122, 11.085 and Texas Commission on Environmental Quality Rules Title 30 Texas Administrative Code §§295.1, *et seq.*

The application was received on January 28, 2008. The application was declared administratively complete and filed with the Office of the Chief Clerk on November 3, 2008. The notice of the application was filed with the Chief Clerk on February 17, 2009, and notice was subsequently published and mailed to the water right holders in the San Jacinto-Brazos Coastal Basin. One request for a contested case hearing was received.

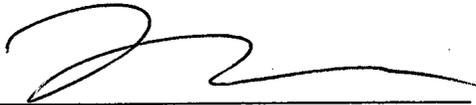
Because this application was declared administratively complete after September 1, 1999, the rules in Chapter 55, Subchapter G, Section 55.250 - 55.256 apply. The Chief Clerk shall mail notice to the applicant, executive director, public interest counsel, and timely hearing requestors not later than 35 days prior to the agenda setting. Applicants, the public interest counsel, and the executive director shall file a response no later than 23 days before agenda, and the hearing requestors shall reply no later than nine days before agenda.

The application is now technically complete and the staff has recommended that the application be granted based on the analysis in the technical review memos.

TCEQ Interoffice Memorandum

Below is the caption for this application:

Consideration of the application by the **Fort Bend County WCID No. 1** for an amendment to Certificate of Adjudication No. 11-5170 to add agriculture purposes to 18,000 acre feet authorized for municipal and industrial, to add diversion points anywhere on the perimeters of the reservoirs on Oyster Creek created by Dam 1, Dam 2, Dam 3, and the Horseshoe Lake Control Dam, and to add authorization for an exempt interbasin transfer of the 18,000 acre feet of water from the San Jacinto-Brazos Coastal Basin to portions of the Brazos River Basin and San Jacinto River Basin lying within the corporate limits of the **City of Sugar Land in Fort Bend County**. Existing Certificate of Adjudication No. 11-5170 authorizes, in part, Fort Bend County WCID No. 1 to impound water in several reservoirs along Jones and Oyster Creeks, including reservoirs controlled by Dam 1, Dam 2, Dam 3, and the Horseshoe Lake Control Dam, and to divert and use, within the San Jacinto-Brazos Coastal Basin, 18,000 acre-feet of water from a point located on the perimeter of the reservoir on Oyster Creek created by Dam 2. The Commission will also consider requests for hearing or reconsideration, related responses and replies, and public comment. (James Aldredge, Tracie Donnelly)

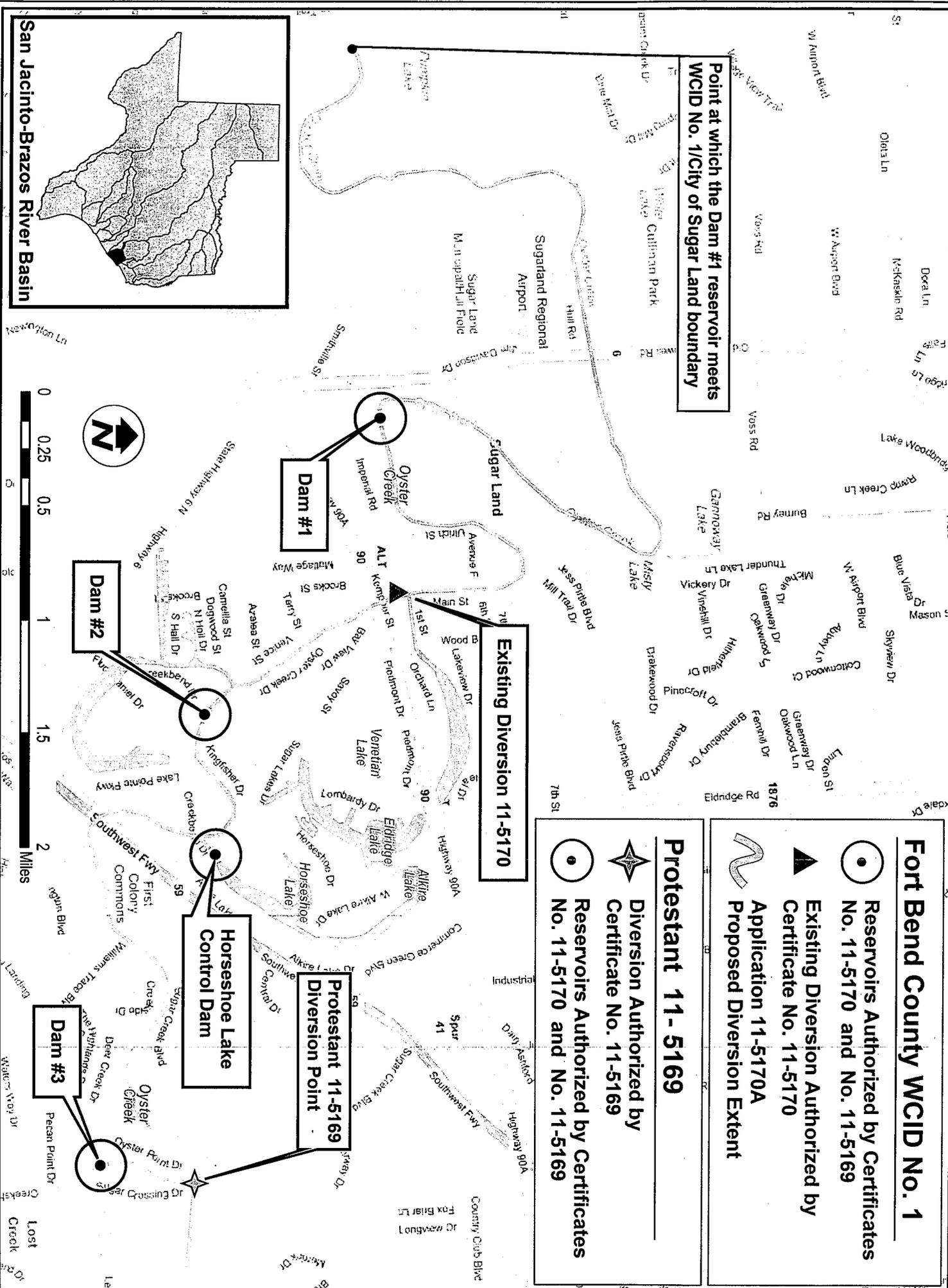
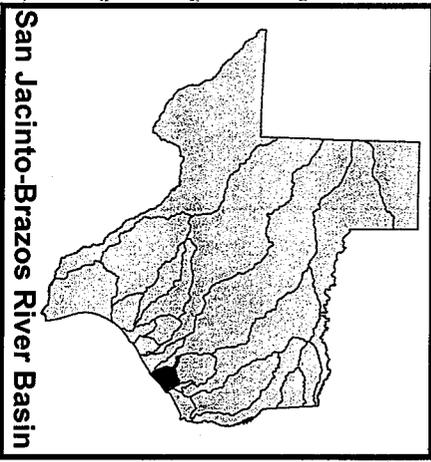


Tracie Donnelly, Project Manager
Water Rights Permitting Team

Enclosure

cc: Kellye Rila, TCEQ
Stephen Densmore, TCEQ
Iliana Delgado, TCEQ
Chris Loft, TCEQ
Robin Smith, TCEQ
Kathy Alexander, TCEQ
Trent Jennings, TCEQ
Justin Degrate, TCEQ

Point at which the Dam #1 reservoir meets WCID No. 1/City of Sugar Land boundary



Existing Diversion 11-5170

Protestant 11-5169 Diversion Point

Horseshoe Lake Control Dam

Protestant 11- 5169

Protestant 11- 5169
 Diversion Authorized by Certificate No. 11-5169
 Reservoirs Authorized by Certificates No. 11-5170 and No. 11-5169

Fort Bend County WCID No. 1

Reservoirs Authorized by Certificates No. 11-5170 and No. 11-5169
 Existing Diversion Authorized by Certificate No. 11-5170
 Application 11-5170A
 Proposed Diversion Extent

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF AN APPLICATION TO AMEND A CERTIFICATE OF ADJUDICATION

APPLICATION NO. 11-5170A

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Fort Bend County W.C.I.D. No. 1 has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the authorized uses and to divert from the perimeters of four authorized reservoirs along Oyster Creek. Fort Bend County W.C.I.D. No. 1 has also applied for an exempt interbasin transfer of the authorized water from the San Jacinto-Brazos Coastal Basin to the Brazos River Basin and the San Jacinto River Basin. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Fort Bend County W.C.I.D. No. 1, P.O. Box 1349, Sugar Land, Texas 77487-1349, has applied for an amendment pursuant to Texas Water Code §§11.122 and 11.085 and Texas Commission on Environmental Quality Rules 30 Texas Administrative Code (TAC) §§295.1, *et seq.* Published and mailed notice of the application is being given to the water right holders of record in the San Jacinto-Brazos Coastal Basin pursuant to 30 TAC §295.158.

Certificate of Adjudication No. 11-5170 authorizes the Fort Bend County W.C.I.D. No. 1, along with Gulf Coast Water Authority, to maintain seven dams and a system of reservoirs on Jones Creek, tributary of Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin, and Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin and impound therein not to exceed a combined total of 8,925.48 acre-feet of water for recreation purposes. Fort Bend County W.C.I.D. No. 1 is authorized to divert and use not to exceed 159.27 acre-feet of water per year for industrial or agricultural purposes to irrigate 35 acres within the District boundaries in the Samuel M. Williams Grant, and 18,000 acre-feet per year from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes in Fort Bend County. Diversion is authorized at a maximum rate of 71.56 cfs (32,200 gpm) from a point on the perimeter of the reservoir created by Fort Bend County W.C.I.D. No. 1 Dam 2 on Oyster Creek. The time priority of this right is June 27, 1914 for the 159.27-acre-foot portion of water and May 14, 1948 for the 18,000-acre-foot portion of water and the reservoir system.

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Fort Bend County W.C.I.D. No. 1 has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the authorized 18,000 acre-feet of water.

The applicant has also applied to divert the authorized 18,000 acre-feet of water from any point, within the corporate limits of the City of Sugar Land, on the perimeters of the reservoirs on Oyster Creek created by Fort Bend County W.C.I.D. No. 1 Dam 1, Fort Bend County W.C.I.D. No. 1 Dam 2, Fort Bend County W.C.I.D. No. 1 Dam 3, and the Horseshoe Lake Control Dam at a combined diversion rate of 71.56 cfs (32,200 gpm).

Additionally, the applicant has applied for an exempt interbasin transfer of the authorized 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land.

The Commission will review the application as submitted by the applicant and may or may not grant the application as requested.

The application and partial fees were received on January 28, 2008, and additional information and fees were received on April 28, August 1, and September 23, 2008. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on November 3, 2008.

PUBLIC COMMENT / PUBLIC MEETING. Written public comments and requests for a public meeting should be submitted to the Office of Chief Clerk, at the address provided in the information section below, within 30 days of the date of newspaper publication of the notice. 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 within 30 days from the date of newspaper publication of this notice. The Executive Director may approve the application unless a written request for a contested case hearing is filed within 30 days after newspaper publication of this notice.

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 in 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 <http://www.tceq.state.tx.us/about/comments.html>. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, the same address. For additional information, individual members of the general public may contact the Office of Public Assistance at 1-800-687-4040. General information regarding the TCEQ can be found at our web site at www.tceq.state.tx.us. Si desea información en Español, puede llamar al 1-800-687-4040 o por el internet al <http://www.tceq.state.tx.us>.

Issued: February 25, 2009

**AMENDMENT TO A
CERTIFICATE OF ADJUDICATION**

CERTIFICATE NO. 11-5170A

TYPE §§ 11.122, 11.085

Owner: Fort Bend County W.C.I.D No. 1

Address: P. O. Box 1349
Sugar Land, TX 77487-1349

Filed: November 3, 2008

Granted:

Purpose: Municipal, Industrial, Agriculture,
and Recreation

County: Fort Bend

Watercourse: Jones Creek, Oyster Creek

Watershed: San Jacinto-Brazos Coastal
Basin, Brazos River Basin, and
San Jacinto River Basin

WHEREAS, Certificate of Adjudication No. 11-5170 authorizes the Fort Bend County W.C.I.D. No. 1, along with Gulf Coast Water Authority, to maintain seven dams and a system of reservoirs on Jones Creek, tributary of Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin, and Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin and impound therein not to exceed a combined total of 8,925.48 acre-feet of water for recreation purposes; and

WHEREAS, Certificate of Adjudication No. 11-5170 also authorizes Fort Bend County W.C.I.D. No. 1 to divert and use not to exceed 159,277 acre-feet of water per year for industrial or agricultural purposes to irrigate 35 acres within the District boundaries in the Samuel M. Williams Grant, and 18,000 acre-feet per year from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes in Fort Bend County. Diversion is authorized at a maximum rate of 71.56 cfs (32,200 gpm) from a point on the perimeter of the reservoir created by Fort Bend County W.C.I.D. No. 1 Dam 2 on Oyster Creek; and

WHEREAS The time priority is June 27, 1914 for the 159,27-acre-foot portion of water and May 14, 1948 for the 18,000-acre-foot portion of water and the reservoir system; and

WHEREAS Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Fort Bend County W.C.I.D. No. 1 has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the authorized 18,000 acre-feet of water; and

WHEREAS, the applicant has also applied to divert the authorized 18,000 acre-feet of water from any point, within the corporate limits of the City of Sugar Land, on the perimeters of the reservoirs on Oyster Creek created by Fort Bend County W.C.I.D. No. 1 Dam 1, Fort Bend County W.C.I.D. No. 1 Dam 2, Fort Bend County W.C.I.D. No. 1 Dam 3, and the Horseshoe Lake Control Dam at a maximum combined diversion rate of 71.56 cfs(32,200 gpm); and

WHEREAS, the applicant has also applied for an exempt interbasin transfer of the authorized 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land; and

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

WHEREAS, one request for a contested case hearing was received for this application; and

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

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

NOW, THEREFORE, this amendment to Certificate of Adjudication No. 11-5170, designated Certificate of Adjudication No. 11-5170A, is issued to the Fort Bend County W.C.I.D. No. 1, subject to the following terms and conditions:

1. USE

- A. In addition to the previous authorizations, Owner is now authorized to use the authorized 18,000 acre-feet of water for agricultural purposes.
- B. Owner is authorized an exempt interbasin transfer of the authorized 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land.

2. DIVERSION

In addition to previous authorization, the Owner may now divert the authorized 18,000 acre-feet of water from any point within the corporate limits of the City of Sugar Land, on the perimeters of the reservoirs on Oyster Creek created by Fort Bend County W.C.I.D. No. 1 Dam 1, Fort Bend County W.C.I.D. No. 1 Dam 2, Fort Bend County W.C.I.D. No. 1 Dam 3, and the Horseshoe Lake Control Dam at a combined diversion rate of 71.56 cfs (32,200 gpm).

3. CONSERVATION

Owner shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses.

4. SPECIAL CONDITIONS

- A. Within 90 days prior to the diversion of water for industrial use, the applicant or contract customer must submit to the TCEQ a water conservation plan to comply with Title 30 TAC Chapter 288.3.

- B. Owner shall implement measures to minimize impacts to aquatic resources due to entrainment or impingement including, but not limited to, the installation of screens on any new diversion facilities with a mesh size of no greater than 0.25 inches and a maximum flow-through screen velocity of 0.5 feet per second.
- C. The authorization for an exempt interbasin transfer described in Paragraph 1. USE is subject to the continued maintenance of the *Surface Water Supply Agreement* between the Owner and the City of Sugar Land. Upon expiration of the contract, Owner shall immediately cease interbasin transfer of the water and either apply to amend the certificate with a new contract specifying a new place of use, or voluntarily forfeit the interbasin transfer authorization. The Commission shall be notified immediately by Owner upon amendment or expiration of the contract and provided with copies of appropriate documents effectuating such changes.
- D. Owner shall install and maintain a measuring device which accounts for, within 5% accuracy, the quantity of water diverted from the points authorized above in Paragraph 2 and maintain measurement records.
- E. Owner shall allow representatives of the TCEQ reasonable access to the property to inspect the measuring device and records.

This amendment is issued subject to all terms, conditions and provisions contained in Certificate No. 11-5170, as amended, except as specifically amended herein.

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

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

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

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

For the Commission

ISSUED:

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Ron Ellis, Application Manager
Water Rights Permitting Team
December 18, 2009

Through:  Lann Bookout, Team Leader
Surface Water Availability & Interstate Compacts Team

From: Kathy Alexander, Hydrologist
Surface Water Availability & Interstate Compacts Team

Subject: Fort Bend County W.C.I.D. No. 1
ADJ 5170
CN600740856
Jones and Oyster Creeks, San Jacinto-Brazos Coastal Basin
Fort Bend County

WATER AVAILABILITY REVIEW

Application Summary

Certificate of Adjudication No. 11-5170 authorizes the Fort Bend County W.C.I.D. No. 1 (Owner), along with Gulf Coast Water Authority, to maintain seven dams and a system of reservoirs on Jones Creek, tributary of Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin, and Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin impounding a combined total of 8,925.48 acre-feet of water for recreation purposes. Owner is authorized to divert and use not to exceed 159.27 acre-feet of water per year from Oyster Creek for industrial or agricultural purposes, and 18,000 acre-feet per year from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes. Owner's currently authorized diversion point is located on the perimeter of the reservoir created by Dam 2. The time priority of this right is June 27, 1914 for the 159.27-acre-foot portion of water and May 14, 1948 for the 18,000-acre-foot portion of water and the reservoir system.

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Owner has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the 18,000-acre-foot portion of water, divert the authorized water from any point on the perimeters of the reservoirs on Oyster Creek created by Dam 1, Dam 2, Dam 3, and the Horseshoe Lake Control Dam within the corporate limits of the City of Sugar Land, and to add authorization for an exempt interbasin transfer (IBT) of the 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land.

No Injury Analysis

Resource Protection staff did not recommend an instream flow requirement. Because the water is already authorized, the request for an exempt interbasin transfer does not require a water availability analysis pursuant to TWC §11.085(v)(4). The request for addition of agricultural (irrigation) use does not require a water availability analysis because the diversion of water is already authorized by Certificate 11-5170. However, the application must be reviewed to ensure that no water rights are affected by the addition of diversion points.

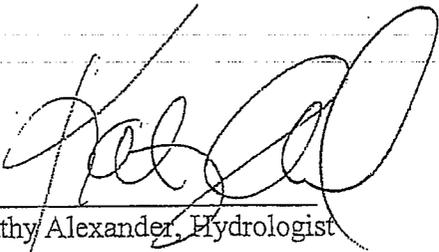
Staff modeled the application using the Full Authorization Simulation of the TCEQ Water Availability Model for the San Jacinto-Brazos Coastal Basin (San Jacinto-Brazos WAM or WAM), which includes all water rights at their fully authorized amounts and does not include return flows. The period of record for the San Jacinto-Brazos WAM is 1940 to 1997.

Staff compared the pre- and post-application volume reliabilities of basin water rights for simulations with the authorized diversions modeled at Dams 1, 2, and 3 with the Dam 2 simulation used as a base line. There is a very minimal impact to Certificate of Adjudication 12-5169, co-owner of the reservoir system, when both certificates divert from Reservoir 3. However, Certificates 12-5169 and 12-5170 both authorize diversion from the seven dams and system of reservoirs and staff is of the opinion that this does not constitute a practical impact on that water right. Simulation results indicate no impact on other water rights as a result of this application.

Conclusion

Based on the No Injury Analysis, staff can support granting the amendment as requested provided the amendment includes the following special condition:

1. The authorization for an exempt interbasin transfer described in Paragraph 1. USE is subject to the continued maintenance of the *Surface Water Supply Agreement* between the Owner and the City of Sugarland. Upon expiration of the contract, Owner shall immediately cease interbasin transfer of the water and either apply to amend the certificate with a new contract specifying a new place of use, or voluntarily forfeit the interbasin transfer authorization. The Commission shall be notified immediately by Owner upon amendment or expiration of the contract and provided with copies of appropriate documents effectuating such changes.



Kathy Alexander, Hydrologist

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Ron Ellis, Application Manager **Date:** June 30, 2009
Water Rights Team
Water Rights Permitting & Availability Section

Through: *DL* Chris Loft, Team Leader
6/30/09 Resource Protection Team
Water Rights Permitting & Availability Section

DL
6/30/09 Dakus Geeslin, Aquatic Scientist
Resource Protection Team
Water Rights Permitting & Availability Section

From: Kaci Myrick, Aquatic Scientist
KM
6/30/09 Resource Protection Team
Water Rights Permitting & Availability Section

Subject: Fort Bend County W.C.I.D. No. 1
ADJ 5170
CN 600740856
Application No. 11-5170A to amend Certificate of Adjudication No. 11-5170
Jones and Oyster Creeks, San Jacinto-Brazos Coastal Basin
Fort Bend County

Environmental reviews of water right applications are conducted in accordance with §11.042, §11.147, §11.1491, §11.150, and §11.152 of the Texas Water Code (TWC) and with TCEQ administrative rules which include 30 TAC §297.53 through §297.56. These statutes and rules require the TCEQ to consider the possible impacts of the granting of a water right on fish and wildlife habitat, water quality, and instream uses associated with the affected body of water. Possible impacts to bays and estuaries are also addressed.

ENVIRONMENTAL ANALYSIS

Certificate of Adjudication No. 11-5170 authorizes the Fort Bend County W.C.I.D. No. 1, along with Gulf Coast Water Authority, to maintain seven dams and a system of reservoirs on Jones Creek, tributary of Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin, and Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin and impound therein not to exceed a combined total of 8,925.48 acre-feet of water for recreation purposes. Owner is authorized to divert and use not to exceed 159.27 acre-feet of water per year from Oyster Creek for industrial or agricultural purposes to irrigate 35 acres within the District boundaries in the Samuel M. Williams Grant, and 18,000 acre-feet per year from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes. Diversion is authorized at a maximum rate of 71.56 cfs (32,200 gpm) from a point on the perimeter of the

reservoir created by Dam 2. The time priority of this right is June 27, 1914 for the 159.27-acre-foot portion of water and May 14, 1948 for the 18,000-acre-foot portion of water and the reservoir system.

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Fort Bend County W.C.I.D. No. 1 has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the authorized 18,000-acre-foot portion of water.

The applicant has also applied to divert the authorized water from any point, within the corporate limits of the City of Sugar Land, on the perimeters of the reservoirs on Oyster Creek created by Dam 1, Dam 2, Dam 3, and the Horseshoe Lake Control Dam at a combined diversion rate of 71.56 cfs (32,200 gpm).

Additionally, the applicant has applied for an exempt interbasin transfer (IBT) of the 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land.

INSTREAM USES

Recreational Uses: There is substantial private residential development surrounding the reservoirs, which frequently includes boat docks. The City of Sugarland's Parks and Recreation Department lists assorted parks, hike and bike trails, and golf courses surrounding the reservoirs. Kayaking, swimming, and fishing also occur on this segment of Oyster Creek.

Aquatic and Riparian Habitats: According to the *Handbook of Texas Online* (Ellis et. al 1997-2000) the vegetation along Oyster Creek consists mostly of water-tolerant hardwoods and conifers, as well as a variety of prairie grasses. The area is flat with local shallow depressions and is surfaced by expansive clays. Aerial photography as well as photographs provided by the applicant depicts the reservoir borders as primarily manicured lawns of turf grass. The hydrology of the Upper and Lower reach of Oyster Creek has experienced significant modification and the flows are often dominated by Gulf Coast Water Authority's use of the reservoirs to convey water pumped from the Brazos River to a lift station at Dam 3, where the water is then pumped out of the reservoirs and into American Canal. As a result of Dam 3 and the lift station, flows are almost eliminated except for very minor seepage through the dam and flows that occur during rainfall-runoff events (Hauck and Du 2008). The habitat in the vicinity of Dams 2 and 3 represents an area distinct from the rest of Oyster Creek, because stream width is wider and water velocities are appreciably less. Thus this lake-like region, especially above Dam 2, functions from a water quality standpoint like the transition zone in a large reservoir where the water body contains characteristics similar to streams as well as reservoirs. (Hauck and Du 2008). The applicant is not requesting a new appropriation of water and the stream channel has experienced substantial modification, therefore the proposed amendment should have negligible impacts to the aquatic and riparian habitat of Oyster Creek. However, in order to protect aquatic resources in Oyster Creek, Resource Protection staff recommends the use of screens on any new diversion structure that will be used on the perimeter of the reservoirs for the purpose of preventing the entrainment or impingement of aquatic organisms.

Water Quality: Upper Oyster Creek is designated as Segment No. 1245 in the *Atlas of Texas Surface Waters* (TCEQ 2004). Applicable uses of Segment No. 1245 include contact recreation, intermediate aquatic life use, fish consumption and public water supply. The general, fish consumption, and public water supply uses are fully supported according to the *2008 Texas Water Quality Inventory* (TCEQ 2008). The intermediate aquatic life use is not supported due to depressed dissolved oxygen (DO) levels and the contact recreation use is not supported due to bacteria levels. The Environmental Protection Agency (EPA) has approved a Total Maximum Daily Load (TMDL) for bacteria and another is underway for depressed DO. Bacteria levels in Segment 1245 are profoundly influenced by runoff (Hauck and Du 2006). The proposed amendment should have minimal impact on the TMDL for bacteria in Segment 1245. With respect to the TMDL for depressed dissolved oxygen, there are indications that some DO exceedances may be associated with rainfall-runoff events, but no physical, chemical, or biological cause can be found in existing data that provides a causative factor for the low DO concentrations (Hauck and Du 2008). Impacts to the TMDL for depressed DO, caused by any alterations in the management of the reservoir system, are unknown at this time.

Bay and Estuary Freshwater Inflows: Freshwater inflows are critical for maintaining the historical productivity of bays and estuaries along the Gulf Coast. The applicant is not requesting an increase in the amount diverted or in the rate of diversion therefore impacts to bays and estuaries should be minimal.

SUMMARY

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Fort Bend County W.C.I.D. No. 1 has applied for an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use to the authorized 18,000-acre-foot portion of water.

The applicant has also applied to divert the authorized water from any point, within the corporate limits of the City of Sugar Land, on the perimeters of the reservoirs on Oyster Creek created by Dam 1, Dam 2, Dam 3, and the Horseshoe Lake Control Dam at a combined diversion rate of 71.56 cfs (32,200 gpm).

Additionally, the applicant has applied for an exempt IBT of the 18,000 acre-feet of water from the San Jacinto-Brazos Coastal Basin to those portions of the Brazos River Basin and the San Jacinto River Basin that lie within the corporate limits of the City of Sugar Land.

Resource Protection staff recommends the following special condition for the permit:

Permittee shall implement measures to minimize impacts to aquatic resources due to entrainment or impingement including, but not limited to, the installation of screens on any new diversion facilities with a mesh size of no greater than 0.25 inches and a maximum flow-through screen velocity of 0.5 feet per second.

This instream use assessment was conducted using current TCEQ operation procedures and policies and available data and information. The recommendations in this environmental analysis are intended for the protection of instream uses and do not necessarily provide protection to

downstream water rights; that analysis is addressed in the hydrology memo and further restrictions may be applicable as necessary. Authorizations granted to the permittee by the water rights permit shall comply with all rules of the Texas Commission on Environmental Quality, and other applicable State and Federal authorizations.

LITERATURE CITED

- Ellis, L.T., W. Pohl and R. Tyler. 1997-2001. Handbook of Texas Online. Texas State Historical Association.
- Hauck, L.M. and B. Du. 2006. Technical Support Document: Upper Oyster Creek (Segment 1245) Bacteria TMDL. Prepared for Texas Commission on Environmental Quality, Texas Institute for Applied Environmental Research, Tarleton State University, Stephenville, Texas.
- Hauck, L.M. and B. Du. 2008. Technical Support Document: Upper Oyster Creek (Segment 1245) Dissolved Oxygen TMDL. (TR0708). Prepared for Texas Commission on Environmental Quality, Texas Institute for Applied Environmental Research, Tarleton State University, Stephenville, Texas.
- TCEQ. 2004. Atlas of Texas Surface Waters: Maps of the Classified Segments of Texas Rivers and Coastal Basins. Publication No. GI-316. Texas Commission on Environmental Quality. Austin, Texas.
- TCEQ. 2008. 2008 Texas Water Quality Inventory and 303(d) List. Texas Commission on Environmental Quality.
- http://www.sugarlandtx.gov/parks_recreation/parks_facilities/community_parks/oyster_creek.asp
(accessed May 29, 2009)

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Ronald Ellis, Project Manager
Water Rights Permitting Team
Water Supply Division

Date: August 5, 2008

Thru: Christopher Loft, Team Leader
Resource Protection Team
Water Supply Division

CL 8/7/08

E. Scott Swanson, Senior Water Conservation Specialist
Resource Protection Team
Water Supply Division

ESS 8/6/08

From: Trent Jennings, Water Conservation Specialist
Resource Protection Team
Water Supply Division

TJ 8/5/08

Subject: Fort Bend County WCID #1
ADJ 5170A
Review of Water Conservation for Administrative Completeness

Certificate of Adjudication No. 11-5170 authorizes the Fort Bend County W.C.I.D. No. 1, along with Gulf Coast Water Authority, to maintain seven dams and reservoirs on Jones Creek tributary of Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin, and Oyster Creek, tributary of the Intracoastal Waterway, San Jacinto-Brazos Coastal Basin and impound therein not to exceed a combined total of 8,925.48 acre-feet of water for in-place recreation purposes. Owner is authorized to divert and use not to exceed 159.27 acre-feet of water per year from Oyster Creek for industrial or agricultural purposes to irrigate 35 acres within the District boundaries in the Samuel M. Williams Grant, and 18,000 acre-feet per year from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes. Diversion is authorized at a maximum rate of 71.56 cfs (32,200 gpm) from a point on the perimeter of the reservoir created by Dam 2. The time priority of this right is June 27, 1914 for the 159.27-acre-foot portion of water and May 14, 1948 for the 18,000-acre-foot portion of water.

Pursuant to a Surface Water Supply Agreement with the City of Sugar Land, Applicant seeks an amendment to Certificate of Adjudication No. 11-5170 to add agricultural (irrigation) use within the portion of the City of Sugar Land that is within District boundaries, to the 18,000-acre-foot portion of water in the San Jacinto-Brazos Coastal Basin in Fort Bend County. Applicant also seeks authorization to divert water at points on the perimeter of, or anywhere between Dam 1 and Dam 3.

The Water Conservation Plan was reviewed by TCEQ staff and found to be administratively complete per 30 TAC Chapter 288.4. The request is not inconsistent with the approved January 2006 Region H Water Plan and the 2007 State Water Plan.

The Water Conservation Staff of the Resource Protection Team recommends that a special condition be included in the water right amendment. **The special condition should state "within 90 days prior to the diversion of water for Industrial/Mining use, the applicant or contract customer must submit to the TCEQ a water conservation plan to comply with Title 30 TAC Chapter 288.3."**

In addition the following standard water conservation language should be included in the permit:
"Owners shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water, so that a water supply is made available for future or alternative uses."

No further review is required by the Water Conservation Staff of the Resource Protection Team.

CERTIFICATE OF ADJUDICATION

CERTIFICATION OF ADJUDICATION: 11-5170

OWNER: Fort Bend County Water Control and Improvement District No. 1
P. O. Box 1349
Sugarland, Texas
77478-1349

COUNTY: Fort Bend

PRIORITY DATES: June 27, 1914
and May 14, 1948

WATERCOURSE: Jones Creek, tributary of Oyster Creek and Oyster Creek, tributary of the Intracoastal Waterway

BASIN: San Jacinto-Brazos Coastal

WHEREAS, by final decree of the 26th Judicial District Court of Williamson County, Texas, in Cause No. 86-492-C, In Re: The Adjudication of Water Rights in the Brazos River Basin and the San Jacinto-Brazos Coastal Basin maintained by the Brazos River Authority, Fort Bend County W.C.I.D. No. One and Galveston County Water Authority dated November 24, 1986 a right was recognized under Permit 1467D and Certified Filing 756 authorizing the Fort Bend County W.C.I.D. No. 1 to appropriate waters of the State of Texas as set forth below:

NOW, THEREFORE, this certificate of adjudication to appropriate waters of the State of Texas in the San Jacinto-Brazos Coastal Basin is issued to the Fort Bend County W.C.I.D. No. 1, subject to the following terms and conditions:

1. IMPOUNDMENT

Owner, along with the Brazos River Authority, is authorized to maintain 7 existing dams as indicated below and to impound in the system of reservoirs created thereby not to exceed a combined total of 8925.48 acre-feet of water. All dams and reservoirs are located in Fort Bend County, Texas and are also authorized under Certificate of Adjudication 12-5169:

| <u>DAM</u> | <u>STREAM</u> | <u>LOCATION</u> |
|------------------------|-----------------------------|---|
| Jones Creek Spillway | Jones Creek | James Knight and W. C. White Grant, Abstract 46 |
| Old Second Lift Dam | Between Jones Oyster Creeks | Randall Jones Grant, Abstract 42 |
| Harlem Prison Farm Dam | Oyster Creek | Jane Wilkins Grant, Abstract 96 |

Certificate of Adjudication 11-5170

| | | |
|---|--------------|---|
| Fort Bend County W.C.I.D. No. 1, Dam 1 | Oyster Creek | Alexander Hodge Grant, Abstract 32 |
| Fort Bend County W.C.I.D. No. 1, Dam 2 | Oyster Creek | Samuel M. Williams Grant, Abstract 97 |
| Horseshoe Lake Control Dam | Oyster Creek | George Brown and Charles Belknap Grant, Abstract 15 |
| Fort Bend County W.C.I.D. No. 1, Dam 3 | Oyster Creek | William Stafford Grant, Abstract 89 |

1. USE

- A. Owner is authorized to divert and use not to exceed 159.27 acre-feet of water per annum from Oyster Creek for industrial purposes and/or the irrigation of 35 acres of land within the boundaries of said district in the Samuel M. Williams Grant, Abstract 97, Fort Bend County, Texas.
- B. Owner is also authorized to divert and use not to exceed 18,000 acre-feet of water per annum from the impounded waters of Jones and Oyster Creeks for municipal and industrial purposes.
- C. Owner is further authorized to use the water impounded in the aforesaid reservoirs for recreation purposes.

2. DIVERSION

- A. Location:
At a point on the perimeter of the reservoir created by the Fort Bend County W.C.I.D. No. 1, Dam 2 and located in the Samuel M. Williams Grant, Abstract 97, Fort Bend County, Texas.
- B. Maximum rate: 71.56 cfs (32,200 gpm).

3. PRIORITY

- A. The time priority of owner's right is June 27, 1914 for the diversion of 159.27 acre-feet of water for irrigation and/or industrial purposes at a maximum diversion rate of 46.67 cfs (21,000 gpm).
- B. The time priority of owner's right is May 14, 1948 for the diversion and use of 18,000 acre-feet of water for municipal and industrial purposes at a maximum diversion rate of 71.56

Certificate of Adjudication 11-5170

cfs (32,000 gpm) and the use of the impounded water for recreation purposes.

4. SPECIAL CONDITIONS

Owner shall maintain suitable outlets in the aforesaid dams authorized herein to allow the free passage of water that owner is not entitled to divert or impound.

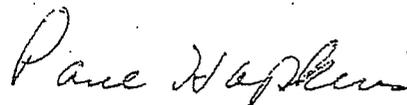
The locations of pertinent features related to this certificate are shown on Pages 28 and 29 of the Brazos IV River Segment Certificates of Adjudication Maps, copies of which are located in the office of the Texas Water Commission, Austin, Texas.

This certificate of adjudication is issued subject to all terms, conditions and provisions in the final decree of the 26th Judicial District Court of Williamson County, Texas, in Cause No. 86-492-C, In Re: The Adjudication of Water Rights in the Brazos River Basin and the San Jacinto-Brazos Coastal Basin maintained by the Brazos River Authority, Fort Bend County W.D.I.D. No. One and Galveston County Water Authority dated November 24, 1986 and supersedes all rights of the owner asserted in that cause.

This certificate of adjudication is issued subject to senior and superior water rights in the San Jacinto-Brazos Coastal Brazos River Basin.

This certificate of adjudication is issued subject to the rules of the Texas Water Commission and its continuing right of supervision of State Water Resources consistent with the public policy of the State as set forth in the Texas Water Code.

TEXAS WATER COMMISSION

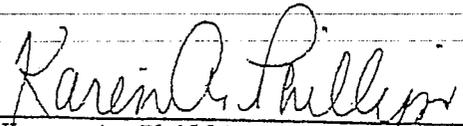


Paul Hopkins, Chairman

DATE ISSUED:

DEC 14 1987

ATTEST:



Karen A. Phillips, Chief Clerk