TCEQ Interoffice Memorandum

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

THRU: Iliana Delgado, Team Leader
Water Rights Permitting Team

FROM: Chris Kozlowski, Project Manager
Water Rights Permitting Team

DATE: December 19, 2014

SUBJECT: Guadalupe-Blanco River Authority
Docket # 2014-1658-WR
WRPERM 12378
CN601180565, RN105856496
Application No. 12378 for a Water Use Permit
TWC §§11.121 and 11.085, Requiring Mailed and Published Notice
Guadalupe River, Guadalupe, San Antonio, Colorado, and Lavaca River Basins, and the Colorado-Lavaca, Lavaca-Guadalupe, and San Antonio-Nueces Coastal Basins
Gonzales County

The Executive Director received an application from the Guadalupe-Blanco River Authority seeking a Water Use Permit pursuant to Texas Water Code §11.121 and Texas Commission on Environmental Quality Rules 30 TAC §§295.1, *et seq.*

The application was received on August 22, 2008. The application was declared administratively complete and filed with the Office of the Chief Clerk on December 12, 2009. The notice of the application was filed with the Chief Clerk on July 23, 2013, and notice was subsequently mailed to the water right holders in the Guadalupe River Basin. Ten requests for a contested case hearing were 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.

Below is the caption for this application:

Consideration of the application by Guadalupe-Blanco River Authority (GBRA) for Water Use Permit No. 12378, seeking authorization: to divert and use not to exceed 75,000 acre feet of water per year from the unappropriated flows of the Guadalupe River, Guadalupe River Basin, for use for municipal and industrial purposes; to construct one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre feet; to store water in the off-channel reservoir(s) for subsequent diversion and use for municipal and industrial purposes; and for an exempt interbasin transfer to the portions of the San Antonio

River Basin, Colorado River Basin, Lavaca River Basin, Colorado-Lavaca Coastal Basin, Lavaca-Guadalupe Coastal Basin, and the San Antonio-Nueces Coastal Basin located within GBRA's statutory district. The diversion, use and storage is also within GBRA's statutory district, which consists of Hays, Comal, Guadalupe Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties. The Commission will consider all timely filed hearing requests and related responses and replies. (Chris Kozlowski, Dinniah Tadema)

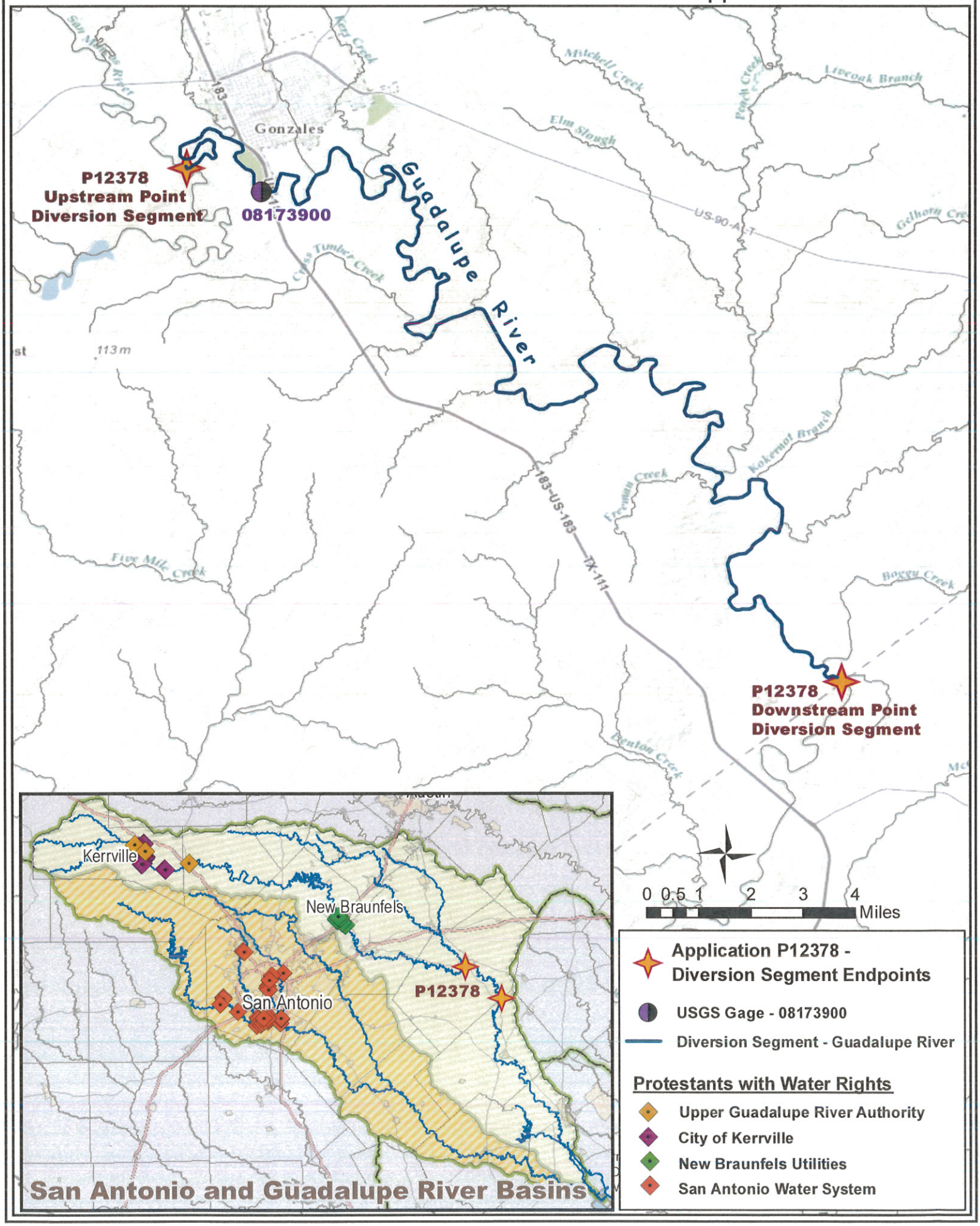
Chris Kozlowski, Project Manager
Water Rights Permitting Team

Enclosure

cc: Kellye Rila, TCEQ
Kathy Alexander, TCEQ
Ron Ellis, TCEQ
Dinniah Tadema, TCEQ
Iliana Delgado, TCEQ
Chris Loft, TCEQ
Robert Hansen, TCEQ
Jennifer Allis, TCEQ
Tracie Donnelly, TCEQ

Docket No. 2014-1658-WR

Guadalupe-Blanco River Authority
Application No. P12378



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF AN APPLICATION FOR A WATER USE PERMIT

APPLICATION NO. 12378

Guadalupe-Blanco River Authority seeks authorization to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Guadalupe River Basin for use for municipal and industrial purposes within GBRA's statutory district which consists of Hays, Comal, Guadalupe Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties in the San Antonio, Colorado, and Lavaca River Basins, and the Colorado-Lavaca, Lavaca-Guadalupe, and San Antonio-Nueces Coastal Basins. Applicant also seeks authorization to construct one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet, and to store water in the off-channel reservoir(s) for subsequent diversion and use for municipal and industrial purposes within GBRA's statutory district. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Guadalupe-Blanco River Authority, 933 East Court Street, Seguin, Texas 78155, Applicant, seeks a Water Use Permit pursuant to Texas Water Code (TWC) §11.121 and §11.085, and Texas Commission on Environmental Quality Rules Title 30 Texas Administrative Code (TAC) §§295.1, *et seq.* Notice is being published and mailed to the water rights holders of record in the Guadalupe River Basin pursuant to Title 30 TAC §295.151.

Guadalupe-Blanco River Authority (Applicant seeks authorization to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Guadalupe River Basin, at a maximum diversion rate of 500 cfs (224,415.588 gpm) for use for municipal and industrial purposes within GBRA's statutory district which consists of Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties. Applicant also seeks authorization to construct one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet, and to store water in the off-channel reservoir(s) for subsequent diversion and use for municipal and industrial purposes within GBRA's statutory district.

The proposed diversion segment will be located in zip code 78629 between the following two points:

1. Upper limit of the diversion segment is located at Latitude 29.4907°N, Longitude 97.4709°W, also bearing N38°W, 4,800 feet from the northwest corner of the Jose Maria Salinas Survey, Abstract No. 59, Gonzales County, Texas.

2. Lower limit of the diversion segment is located at Latitude 29.3488°N, Longitude 97.2891°W, also bearing S 30°W, 2,220 feet from the east corner of the Benjamin Fulcher Survey, Abstract No. 21, Gonzales County, Texas.

The application and a portion of the fees were received on August 22, 2008. Additional information and fees were received on December 11, 2008, August 11, October 29, and December 18, 2009, February 12, 2010, June 2, and July 1, 2013. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on December 23, 2009.

The Executive Director completed the technical review of the application and prepared a draft permit. The draft permit, if granted, would include special conditions requiring streamflow restrictions. The application, technical memoranda, and Executive Director's draft permit are available for viewing and copying at the Office of the Chief Clerk, 12100 Park 35 Circle, Bldg. F, Austin, TX 78753.

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: (i) 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 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 Public Education Program 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 or por el internet al www.tceq.state.tx.us.

Issued: July 29, 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

WATER USE PERMIT

PERMIT NO.	12378	TYPE	§§ 11.121, 11.085
Permittee:	Guadalupe-Blanco River Authority	Address:	933 East Court Street Seguin, TX 78155
Filed:	December 23, 2009	Granted:	
Purpose:	Municipal & Industrial	Counties:	Gonzales, Hays, Comal, Guadalupe, Caldwell, DeWitt, Victoria, Kendall, Refugio, Calhoun
Watercourse:	Guadalupe River	Watershed:	Guadalupe River Basin, San Antonio River Basin, Colorado River Basin, Lavaca River Basin, Colorado-Lavaca Coastal Basin, Lavaca-Guadalupe Costal Basin, San Antonio-Nueces Coastal Basin

WHEREAS, Guadalupe-Blanco River Authority (GBRA or Applicant) seeks authorization to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Guadalupe River Basin, at a maximum diversion rate of 500 cfs (224,430 gpm) for municipal and industrial purposes within GBRA's statutory district, which consists of Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties; and

WHEREAS, Applicant also seeks authorization to construct one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet, and to store water in the off-channel reservoir(s) for subsequent diversion and use for municipal and industrial purposes within GBRA's statutory district; and

WHEREAS, Applicant seeks an exempt interbasin transfer to the portions of the San Antonio River Basin, Colorado River Basin, Lavaca River Basin, Colorado-Lavaca Coastal Basin, Lavaca-Guadalupe Coastal Basin, and the San Antonio-Nueces Coastal Basin located within Hays, Coral, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties; and

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

WHEREAS, this permit, if granted, is subject to requirements and orders of the South Texas Watermaster; and

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

WHEREAS, _____ requests for a contested case hearing were received for this application; 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 water use permit;

NOW, THEREFORE, this Water Use Permit No. 12378 is issued to the Guadalupe-Blanco River Authority subject to the following terms and conditions:

1. IMPOUNDMENTS

Permittee is authorized to construct one or more off-channel reservoirs in Gonzales County with a maximum combined storage capacity of 125,000 acre-feet.

2. USE

A. Permittee is authorized to divert and use not to exceed 75,000 acre-feet of water per year from the Guadalupe River, Guadalupe River Basin for municipal and industrial purposes within GBRA's statutory district, which consists of Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties.

B. Permittee is authorized to store water lawfully diverted under this permit in the off-channel reservoir(s) authorized in Paragraph 1 and may subsequently divert and use this stored water for municipal and industrial purposes within GBRA's statutory district, which consists of Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties.

C. Permittee is authorized an exempt interbasin transfer to the portions of the San Antonio River Basin, Colorado River Basin, Lavaca River Basin,

Colorado-Lavaca Coastal Basin, Lavaca-Guadalupe Coastal Basin, and San Antonio-Nueces Coastal Basin located within Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties.

3. DIVERSION

A. Permittee is authorized to divert water from the Guadalupe River in the following diversion segment:

1. Upper limit of the diversion segment is located at Latitude 29.4907°N, Longitude 97.4709°W, also bearing N38°W, 4,800 feet from the northwest corner of the Jose Maria Salinas Survey, Abstract No. 59, Gonzales County, Texas.

2. Lower limit of the diversion segment is located at Latitude 29.3488°N, Longitude 97.2891°W, also bearing S30°W, 2,220 feet from the east corner of the Benjamin Fulcher Survey, Abstract No. 21, Gonzales County, Texas.

B. Permittee is authorized to divert the authorized water at a maximum combined diversion rate of 500 cfs (224,430 gpm).

4. TIME PRIORITY

The time priority for this right is December 23, 2009.

5. 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, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into, on or after the effective date of 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 wholesale customer in the resale of the water will be required to implement water conservation measures.

6. SPECIAL CONDITIONS

A. Diversions of water from the Guadalupe River upstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales) shall only be authorized when streamflows exceed the following values at USGS Gage No. 08173900

(Guadalupe River and Gonzales), subject to Special Conditions C - J below:

Season	Subsistence	Base	Small Seasonal Pulse (2 per season)	Large Seasonal Pulse (1 per season)
Winter	210 cfs	796 cfs	Trigger: 1,150 cfs Volume: 9,640 af Duration: 13 days	N/A
Spring	210 cfs	791 cfs	N/A	N/A
Summer	210 cfs	727 cfs	Trigger: 950 cfs Volume: 7,060 af Duration: 10 days	Trigger: 1,760 cfs Volume: 14,800 af Duration: 14 days
Fall	180 cfs	746 cfs	Trigger: 1,410 cfs Volume: 11,400 af Duration: 13 days	N/A

cfs = cubic feet per second
af = acre-feet

B. Diversions of water from the Guadalupe River downstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales) shall only be authorized as follows:

1. When streamflows at USGS Gage No. 08173900 (Guadalupe River at Gonzales) exceed subsistence and base flow values in Special Condition A above plus the diversion rate at the time of the diversion; and

2. Applicable pulse flow requirements in Special Condition A are met and diversions from the Guadalupe River do not prevent a qualifying pulse from passing the diversion point; and

3. Diversions below USGS Gage No. 08173900 (Guadalupe River at Gonzales) are also subject to Special Conditions C - J below.

C. Permittee shall not divert water from the Guadalupe River if streamflow at USGS Gage No. 08173900 (Guadalupe River at Gonzales) is below the applicable subsistence flow.

D. If streamflow at USGS Gage No. 08173900 (Guadalupe River at Gonzales) is greater than the applicable subsistence flow but less than the applicable base flow, Permittee shall not divert water from the Guadalupe River unless the measured flow at the gage exceeds the applicable subsistence flow, plus 50% of the difference between measured streamflow and the applicable subsistence flow.

E. If streamflow at USGS Gage No. 08173900 (Guadalupe River at Gonzales) is greater than the applicable base flow but less than the applicable high flow pulse trigger requirement, permittee may divert water from the Guadalupe River unless streamflows fail below the applicable base flow, in which case Special Conditions C and D apply to the diversions.

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

G. Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.

H. If a qualifying pulse flow event is recorded at USGS Gage No. 08173900 (Guadalupe River at Gonzales), this pulse event shall satisfy a pulse requirement for that event within the respective season. A qualifying event occurs if the pulse flow trigger requirement is met and either the pulse flow volume or duration requirement is met. Permittee may divert water from the Guadalupe River when streamflows at USGS Gage No. 08173900 (Guadalupe River at Gonzales) exceed the pulse flow trigger requirement so long as such diversions do not prevent the occurrence of a qualifying high flow pulse which would otherwise have occurred.

I. If a pulse flow requirement for the summer large seasonal pulse is satisfied, one of the summer small seasonal pulse requirements is also considered to be satisfied.

J. If Permittee has stored water in any off-channel reservoir in accordance with the terms and conditions of this permit, including any applicable environmental flow requirements in effect at the time the water was diverted from the Guadalupe River and stored in the off-channel reservoir, Permittee may divert and use that stored water at any time, even if the applicable environmental flow requirement for diversion from the Guadalupe River is not met at the time of the subsequent diversion and use of that stored water.

K. Within ten years of issuance of this permit, and prior to impoundment of water diverted hereunder in any off-channel reservoir, Permittee shall either: (a) notify the Executive Director that the authorized off-channel reservoir(s) as proposed in the plans filed with the application will be used for storage of water diverted under this permit and identify the specific location of the reservoir(s); or (b) submit a detailed statement and plans under Texas Water Code §11.144 for alterations and changes to the plans submitted with the application, including identifying the location for the specific off-channel reservoir to be constructed; or (c) file an application to extend the time for submitting a detailed statement and plans modifying the plans submitted with the application under Texas Water Code §11.144 as described under item (b) of this special condition.

L. Permittee may store in and divert from the off-channel reservoir(s) other waters from the Guadalupe River Basin (authorized by surface water rights) so long as the underlying surface water right authorizes storage in the off-channel reservoir.

M. Special Conditions A thru I are subject to adjustment by the commission if the commission determines, through an expedited public review process, that such adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustment shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).

N. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures may include, but shall not be limited to, the installation of screens at the diversion structures within the diversion reach.

O. Prior to the diversion of water authorized herein, Permittee shall contact the South Texas Watermaster.

P. Permittee shall install and maintain a measuring device which accounts for, within 5% accuracy, the quantity of water diverted from the point(s) authorized above in Diversion Paragraph 3.

Q. Permittee shall record the streamflow level at USGS Gage 08173900 (Guadalupe River at Gonzales) the time of the gage reading, the quantity of water diverted and the rate at which water is diverted when diversions from the Guadalupe River are initiated. Permittee shall continue to monitor and record streamflow levels and its diversion rate no less frequently than once every six hours while diversion of water from the Guadalupe River occurs. Permittee shall make these records available to the South Texas Watermaster on a weekly basis.

R. Permittee shall allow representatives of the TCEQ reasonable access to the property to inspect the measuring device and records.

This water use permit is issued subject to all superior and senior water rights in the Guadalupe 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 permit.

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

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

For the Commission

ISSUED:

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Chris Koslowski, Project Manager
Water Rights Permitting Team
Water Rights Permitting & Availability Section

Date: January 3, 2013

Thru: Chris Loft, Team Leader
1/4/13
Resource Protection Team
Water Rights Permitting & Availability Section

Kristin Wang, Senior Water Conservation Specialist
KW
1/3/13
Resource Protection Team
Water Rights Permitting & Availability Section

From Scott Swanson, Senior Water Conservation Specialist
Resource Protection Team
1/3/13
Water Rights Permitting & Availability Section

Subject: Guadalupe-Blanco River Authority
WRPERM 12378
CN600253637
Water Conservation Review

Guadalupe-Blanco River Authority (GBRA) seeks a Water Use Permit to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Gonzales County, Guadalupe River Basin, at a maximum diversion rate of 500 cfs (224,415.588 gpm) for municipal and industrial purposes within GBRA's statutory district (Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties). The applicant also seeks authorization to construct and maintain one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet and to divert from any such reservoir water diverted from the Guadalupe River as well as water from other sources.

Per 30 TAC 295.9(4), applications to appropriate or to use water for municipal use, industrial or mining use, or agricultural use, including irrigation use requires the submittal of water conservation and drought contingency plans.

Additionally, the applicant is required to provide evidence that the amount of water appropriated will be beneficially used, i.e., effectively managed and not wasted pursuant to Texas Water Code (TWC), Section 11.134(b)(3)(A). Also, the applicant must provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation pursuant to TWC 11.134(b)(4). To provide that evidence, the applicant must submit a water conservation plan in accordance with Title 30, Texas

Administrative Code (TAC), Chapter 288. In applications where a new appropriation of water is requested, the review includes an analysis of whether the requested appropriation is reasonable and necessary for the proposed uses in accordance with TWC 11.134 and 30 TAC 297.50.

The purpose of this review is to;

(1) determine whether reasonable water conservation goals have been set;
(2) determine whether the proposed strategies can achieve the stated goals;
(3) determine whether there is a substantiated need for the water and whether the amount to be appropriated is reasonable for the proposed use; and
(4) determine whether the water conservation plan addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan.

If these criteria are met, then staff considers this sufficient evidence to conclude that the applicant will avoid waste and achieve water conservation. This review forms a basis for permit conditions and limitations as provided by TWC 11.134.

The water conservation and drought contingency plans for GBRA were reviewed by TCEQ staff and found to be administratively complete per 30 TAC 288.

The 2009 GBRA Water Conservation Plan identifies five and ten-year service area goals for per capita water use to be 150 and 147 respectively. The submitted Water Conservation Implementation Report lists a number of water conservation measures that are ongoing. Through implementation of educational programs and outreach, volumetric pricing and billing, and the installation of more efficient plumbing fixtures in new construction as well as retrofits of older buildings, TCEQ water conservation staff has deemed these goals and strategies to be reasonable.

In addition, staff conducted an analysis of the needs. According to the 2011 Region L Water Plan, the project will have a firm yield of 25,000 acre-feet per year. The total water demands downstream of the project for Gonzales, DeWitt, Victoria, Refugio, and Calhoun counties are projected to increase by 80,386 acre-feet by 2060. Based on the analysis, the amount of the requested appropriation is deemed to be reasonable.

The application is consistent with the approved 2012 State Water Plan and is listed as a recommended water management strategy for GBRA in the approved January 2011 Region L Water Plan.

Staff recommends the following water conservation language should be included in the permit:

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, or prevent the pollution of water, so that a water supply is made available for future or alternative uses. Such plans shall include a requirement that in every water supply contract entered into, on or after the effective date of 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.

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Chris Kozlowski, Project Manager
Water Rights Permitting Team
Water Rights Permitting & Availability Section

Date: July 15, 2013

From: Kathy Alexander, Ph.D.
Technical Specialist
Water Rights Permitting & Availability Section

Subject: Guadalupe-Blanco River Authority
WRPERM 12378
CN611805 65
Guadalupe River, Guadalupe River Basin
Gonzales County

WATER AVAILABILITY ANALYSIS ADDENDUM

Review and Conclusion

Staff completed its Water Availability Analysis on April 15, 2013. In that analysis, staff recommended that a special condition be included in the permit requiring Guadalupe Blanco River Authority (GBRA) to amend the permit to add specific off-channel reservoirs (Paragraph 5.K. of the draft permit). Subsequently, GBRA submitted additional information on the off-channel reservoirs on June 2, 2013 and July 1, 2013. The June 2, 2013 submittal includes an example Elevation-Area-Capacity relationship, a calculation of the average annual net evaporative loss, and an excerpt from the 2011 South Central Texas Regional Water Plan. The July 1, 2013 submittal included a Technical Memorandum summarizing preliminary information such as preliminary embankment side-slopes, erosion protection, and a cross-section for an embankment. Staff reviewed this information and found it to be adequate.

Based on the specific information provided by GBRA, staff recommends modifying Paragraph 5.K. as follows:

Within ten years of issuance of this permit, and prior to impoundment of water diverted hereunder in any off-channel reservoir, Permittee shall either: (a) notify the Executive Director that the authorized off-channel reservoir(s) as proposed in the plans filed with the application will be used for storage of water diverted under this permit and identify the specific location of the reservoir(s); or (b) submit a detailed statement and plans under Texas Water Code §11.144 for alterations and changes to the plans submitted with the application, including identifying the location for the specific off-channel reservoir to be constructed; or (c) file an application to extend the time for submitting a detailed statement and plans modifying the plans submitted with the application under Texas Water Code §11.144 as described under item (b) of this special condition.

In addition, staff previously recommended that GBRA record streamflow levels in the Guadalupe River, the time of the gage reading, the rate at which water is diverted and the quantity of water diverted and to monitor and record this streamflow and diversion information every four hours. After further review, staff agrees that monitoring and recording streamflow conditions, as required in Paragraph 5.Q, can occur every six hours and still be protective of water rights and the environment.

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Chris Kozlowski, Project Manager
Water Rights Permitting Team
Water Rights Permitting & Availability Section

Date: April 15, 2013

From: Kathy Alexander, Ph.D.
Technical Specialist
Water Rights Permitting & Availability Section

Subject: Guadalupe-Blanco River Authority
WRPERM 12378
CN611805G5
Guadalupe River, Guadalupe River Basin
Gonzales County

WATER AVAILABILITY ANALYSIS

Application Summary

Guadalupe-Blanco River Authority (GBRA) seeks a Water Use Permit to divert and use 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Guadalupe River Basin, in Gonzales County, at a maximum diversion rate of 500 cfs (224,415.588 gpm) from the river, for municipal and industrial purposes within GBRA's statutory district (Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties). GBRA's application requests a diversion reach that begins below the confluence of the Guadalupe and San Marcos Rivers and extends approximately 30 miles downstream to the Gonzales-Guadalupe County line. GBRA also requests authorization to construct and maintain one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet and to divert from any such reservoir water diverted from the Guadalupe River as well as water from other sources. GBRA also requests an exempt interbasin transfer of the diverted water to the portions of the San Antonio River Basin, Colorado River Basin, Lavaca River Basin, Colorado-Lavaca Coastal Basin, Lavaca-Guadalupe Coastal Basin, and the San Antonio-Nueces Coastal Basin located within Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties. The application was administratively complete on December 23, 2009.

Water Availability Analysis

Pursuant to 30 Texas Administrative Code (TAC) §298 Subchapter E, Resource Protection staff recommend that the application be subject to instream flow requirements. Specific instream flow requirements are included in Resource Protection

staff's April 15, 2013 memorandum.

Reviews of requests for interbasin transfers are conducted in accordance with §11.085 of the Texas Water Code and TCEQ rules regarding IBTs. GBRA's request for an interbasin transfer is exempt under TWC §11.085 (v)(3) and (v)(4). Therefore, staff did not perform a review under TWC §11.085. However, the request for a new appropriation does require a review under TWC §11.134 and TCEQ's rules.

Staff considered GBRA's request to divert water from other sources from the off-channel reservoir. Staff's opinion is that so long as the underlying water right authorizes storage in the off-channel reservoir, or use of the water does not require a water rights permit, this request should be granted and the permit should include a special condition reflecting this.

The Water Rights Analysis Package (WRAP) simulates management of the water resources of a river basin. The Texas Commission on Environmental Quality (TCEQ) uses WRAP in the evaluation of water right permit applications using priority-based water allocations. WRAP is a generalized simulation model for application to any river basin, and input datasets must be developed for the particular river basin of concern. The TCEQ developed water availability models (WAMs) for Texas river basins that include geographical information, water right information, naturalized flows, evaporation rates, and specific management assumptions. Hydrology staff operates WRAP to evaluate water rights applications to determine water availability and to ensure that senior water rights are protected.

Staff modeled the application using the Full Authorization simulation of the Guadalupe WAM where water rights utilize their maximum authorized amounts for storage and diversion, and return flows are not included. The period of record for the Guadalupe WAM is 1934 through 1989. On August 8, 2012 the TCEQ adopted environmental flow standards for the Guadalupe River Basin. In order to determine water availability for this application, the Full Authorization simulation was updated to include the environmental flow standards for the Guadalupe River at Gonzales and all downstream measurement points.

In order to ensure protection of the standards, water availability for this application was determined based on the standards set forth in 30 TAC §298 (c)(6), (c)(8), and (c)(9). Under 30 TAC §298.365, the priority date for the environmental flow standards in the Guadalupe WAM is March 1, 2011. For modeling purposes, this application was modeled with a priority date of March 5, 2011 although the priority date of the application is December 23, 2009. The simulation results indicate that 75,000 acre-feet of water is available from the Guadalupe River in 77% of the years in the period of record.

30 TAC §297.42(d) provides that the required water availability for projects that are not based on the continuous availability of streamflow shall be determined on a case-by-case basis based upon whether the proposed project can be viable for the intended purpose and the water will be beneficially used without waste. The determination of whether the water will be beneficially used without waste is addressed in the conservation review of the application. Regarding whether the proposed project is viable, review of the amount of remaining unappropriated water at USGS Gage

08173900, Guadalupe River at Gonzales indicates that there is no unappropriated water in over 100 months of the period of record. However, the application includes a request to construct off-channel storage. Construction of this storage should ensure that water will be available for the intended purposes from the off-channel reservoir(s) when streamflow in the Guadalupe River is not available for diversion. Therefore, staff's opinion is that the project can be viable for the intended purpose.

The application was also evaluated in accordance with 30 TAC §298.380(a) to determine whether the new appropriation of water requested in the application would cause or contribute to an impairment of inflow regimes as described in that subsection. Results of the analysis indicate no impairment of the inflow regime under the rule. Because staff found that the application did not impair inflow regimes, which by rule are adequate to support a sound ecological environment, the application is consistent with any applicable Coastal Management Program (CMP) goals and policies.

This application is junior to existing water rights in the Guadalupe Basin; therefore it cannot affect senior water rights. In addition, any permit granted by this application is subject to the requirements and orders of the South Texas Watermaster. However, in order to protect downstream water rights, ensure protection of the environmental flow standards when diversions from the Guadalupe River occur, and to assist the South Texas Watermaster, staff recommends that any diversions from the Guadalupe River and the streamflow at the time of the diversion be measured and recorded. In addition, because the specific location of the off-channel reservoir(s) is not known, staff recommends that a special condition be included in the permit requiring GBRA to amend the permit to add specific off-channel reservoirs.

Conclusion

Staff can support granting the application, provided the permit includes Resource Protection staff's recommendations and the following special conditions:

1. Permittee shall record the streamflow level at USGS Gage 08173900, Guadalupe River at Gonzales, the time of the gage reading, the amount of water diverted, and the rate at which water is diverted when diversions from the Guadalupe River are initiated. Permittee shall continue to monitor and record streamflow levels and its diversion rate no less frequently than once every four hours while diversion of water from the Guadalupe River occurs. Permittee shall make these records available to the South Texas Watermaster on a weekly basis.
2. Within ten years of issuance of this permit, and prior to diversion of water from the Guadalupe River and impoundment in the off channel reservoir(s), Permittee shall apply for an amendment to this permit to either: (a) authorize storage of water in a specific off channel reservoir(s), or (b) extend the time for filing an amendment to add a specific off channel reservoir(s).
3. Permittee may store and divert other waters from the Guadalupe River Basin (authorized by other surface water rights) so long as the underlying surface water right authorizes storage in the off-channel reservoir.

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Chris Kozlowski, Project Manager Date: April 15, 2013
Water Rights Permitting Team
Water Rights Permitting & Availability Section

Through: Chris Loft, Team Leader
Resource Protection Team
Water Rights Permitting & Availability Section

Robert Hansen, Aquatic Scientist
Resource Protection Team
Water Rights Permitting & Availability Section

From: 4/15/13 Kyle Garmany, Aquatic Scientist
Resource Protection Team
Water Rights Permitting & Availability Section

Subject: Guadalupe-Blanco River Authority
WRPERM 12378
CN611805665
Water Right Application No. 12378 for a Water Use Permit
Guadalupe River
Guadalupe River Basin
Gonzales County

Application Summary: Guadalupe-Blanco River Authority (GBRA) seeks a Water Use Permit to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Gonzales County, Guadalupe River Basin, at a maximum diversion rate of 500 cfs (224,415.588 gpm) for municipal and industrial purposes within GBRA's statutory district (Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties). The applicant seeks to authorize a diversion reach that begins below the confluence of the Guadalupe and San Marcos Rivers and extends approximately 30 miles downstream to the Gonzales-Guadalupe County line. The applicant also seeks authorization to construct and maintain one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet and to divert from any such reservoir water diverted from the Guadalupe River as well as water from other sources.

Environmental Analysis: The Guadalupe River Basin is located in south central Texas, with the headwaters in southwestern Kerr County. The river is 432 miles long and flows southeastward through a drainage area of 6,061 square miles. The basin is divided into Balcones Escarpment in the upper portion and the Gulf Coastal Plains area in the lower basin. The basin's principal tributaries are the North and South Fork of the Guadalupe River, Johnson Creek, the Comal River, the Blanco River, the San Marcos River, Geronimo Creek, Plum Creek, Peach Creek, Sandies Creek and Coleto Creek. Major land uses include

agriculture, in the form of crop and livestock production, as well as oil and gas. Primary industries consist of the manufacture of steel, gravel, plastics and chemical production. Downstream of Canyon Reservoir, the Guadalupe River flows over bedrock substrate and through swift water runs. The Guadalupe River Basin and Lavaca-Guadalupe Coastal Basin are located within four eco-regions: the Edwards Plateau, the Texas Blackland Prairie, the East Central Texas Plains, and the Western Gulf Coastal. According to the *Handbook of Texas Online*, near the river, high limestone bluffs support bald cypress, mesquite, and grasses. Sections of the upper and middle reaches of the river are suitable for canoeing, but a number of small waterfalls prevent uninterrupted navigation of the entire river.

On 08 August 2012, the Texas Commission on Environmental Quality (TCEQ) adopted environmental flow standards for the Guadalupe and San Antonio Rivers, their associated tributaries and San Antonio Bay. By rule, these environmental flow standards are considered adequate to support a sound ecological environment. This review is conducted in accordance with §11.1471 of the Texas Water Code, and TCEQ administrative rules which include 30 TAC §298 Subchapter E (Guadalupe, San Antonio, Mission, and Aransas Rivers, and Mission, Copano, Aransas, and San Antonio Bays). The nearest measurement point to the application is USGS Gage No. 08173900 – Guadalupe River at Gonzales (30 TAC §298.380(c)(6)). This measurement point is located approximately two miles downstream of the applicant's uppermost proposed diversion point. The environmental flow standards for this segment of the Guadalupe River are shown in Table 1.

Table 1. Environmental flow standards (cfs) at Gage No. 08173900 - Guadalupe River at Gonzales, TX.

Season	Subsistence	Base	Small Seasonal Pulse (2 per season)	Large Seasonal Pulse (1 per season)
Winter	210 cfs	796 cfs	Trigger: 1,150 cfs Volume: 9,640 af Duration: 13 days	Trigger: 4,140 cfs Volume: 48,300 af Duration: 29 days
Spring	210 cfs	791 cfs	Trigger: 3,250 cfs Volume: 26,900 af Duration: 17 days	Trigger: 4,154 cfs Volume: 50,000 af Duration: 24 days
Summer	210 cfs	727 cfs	Trigger: 950 cfs Volume: 7,060 af Duration: 10 days	Trigger: 1,760 cfs Volume: 14,800 af Duration: 14 days
Fall	180 cfs	746 cfs	Trigger: 1,410 cfs Volume: 11,400 af Duration: 13 days	Trigger: 4,154 cfs Volume: 41,200 af Duration: 23 days

cfs = cubic feet per second
af = acre-feet

Under 30 TAC §298.385, water right permits issued after the effective date of the adopted environmental flow standards shall contain flow restriction special conditions that are adequate to protect the adopted standards. 30 TAC §298.375(d)(1) requires a water right holder to pass high flow pulses if streamflows at the applicable measurement point are above the applicable subsistence or base flow standard, and if the applicable high flow pulse trigger requirement is met. The rules provide that the permitee shall not divert or store water during a high flow pulse, except when streamflow at the applicable measurement point exceeds the applicable high flow pulse trigger level and until either the applicable volume amount has passed the measurement point or the applicable duration time has passed. 30 TAC §298.355 defines the applicable seasons as Fall (October-December), Winter (January-March), Spring (April-June), and Summer (July-September). Under 30 TAC §298.375(d)(4) each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency. Under 30 §298.375(d)(6) if a pulse flow requirement for a large seasonal pulse is satisfied for a particular season, one of the smaller pulse requirements is also considered to be satisfied. 30 TAC §298.385 (b) provides that if the requested diversion rate is less than 20% of the applicable pulse flow trigger requirements, special conditions are not necessary to protect that high flow pulse. The maximum diversion rate requested in the application is 500 cfs. Therefore, the spring small seasonal pulse and the winter, spring, and fall large seasonal pulses do not apply to this application.

In addition, in order to protect the standards, if diversions occur downstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales), diversions should be limited to the specific subsistence and base flow values shown in Table 1 above plus the actual diversion rate at the time of the diversions. In addition, diversions downstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales) shall not prevent a qualifying high flow pulse, as measured at USGS Gage No. 08173900 (Guadalupe River at Gonzales) from passing their diversion point.

Freshwater inflows: Freshwater inflows are important for maintaining the historical productivity of bays and estuaries along the Gulf Coast. By rule, impairment of inflow regimes will be considered during the water availability determination for this application.

SUMMARY

Applicant seeks a Water Use Permit to divert and use not to exceed 75,000 acre-feet of water per year from the unappropriated flows of the Guadalupe River, Gonzales County, Guadalupe River Basin, at a maximum diversion rate of 500 cfs (224,415.588 gpm) for municipal and industrial purposes within GBRA's statutory district (Hays, Comal, Guadalupe, Caldwell, Gonzales, DeWitt, Victoria, Kendall, Refugio, and Calhoun Counties). The applicant also seeks authorization to construct and maintain one or more off-channel reservoirs in Gonzales County with a combined maximum storage capacity of 125,000 acre-feet and to divert from any such reservoir water diverted from the Guadalupe River as well as water from other sources.

Resource Protection staff recommend the following special conditions be included in the permit, if granted:

1. Diversions of water from the Guadalupe River upstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales) shall only be authorized when streamflows exceed the following values at USGS Gage No. 08173900 - Guadalupe River at Gonzales, TX., subject to Special Conditions 3-10 below:

Season	Subsistence	Base	Small Seasonal Pulse (2 per season)	Large Seasonal Pulse (1 per season)
Winter	210 cfs	796 cfs	Trigger: 1,150 cfs Volume: 9,640 af Duration: 13 days	N/A
Spring	210 cfs	791 cfs	N/A	N/A
Summer	210 cfs	727 cfs	Trigger: 950 cfs Volume: 7,060 af Duration: 10 days	Trigger: 1,760 cfs Volume: 14,800 af Duration: 14 days
Fall	180 cfs	746 cfs	Trigger: 1,410 cfs Volume: 11,400 af Duration: 13 days	N/A

cfs = cubic feet per second
af = acre-feet

2. Diversions of water from the Guadalupe River downstream of USGS Gage No. 08173900 (Guadalupe River at Gonzales) shall only be authorized as follows:
   a. When streamflows at USGS Gage No. 08173900 (Guadalupe River at Gonzales) exceed subsistence and base flow values in Special Condition 1 above plus the diversion rate at the time of the diversion;
   b. Applicable pulse flow requirements in Special Condition 1 are met and diversions from the Guadalupe River do not prevent a qualifying pulse from passing the diversion point; and
   c. Diversions below USGS Gage No. 08173900 - Guadalupe River at Gonzales, TX are also subject to Special Conditions 3-10 below.

3. Permittee shall not divert water from the Guadalupe River if streamflow at USGS Gage No. 08173900 is below the applicable subsistence flow.

4. If streamflow at USGS Gage No. 08173900 is greater than the applicable subsistence flow but less than the applicable base flow, Permittee shall not divert water from the Guadalupe River unless the measured flow at the gage exceeds the applicable subsistence flow, plus 50% of the

difference between measured streamflow and the applicable subsistence flow.

5. If streamflow at USGS Gage No. 08173900 is greater than the applicable base flow, but less than the applicable high flow pulse trigger requirement, Permittee may divert water from the Guadalupe River unless streamflows fall below the applicable base flow, in which case Special Conditions 3 and 4 apply to the diversions.

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

7. Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.

8. If a qualifying pulse flow event is recorded at USGS Gage No. 08173900 (Guadalupe River at Gonzales), this pulse event shall satisfy a pulse requirement for that event within the respective season. A qualifying event occurs if the pulse flow trigger requirement is met and either the pulse flow volume or duration requirement is met. Permittee may divert water from the Guadalupe River when streamflows at USGS Gage No. 08173900 (Guadalupe River at Gonzales) exceed the pulse flow trigger requirement so long as such diversions do not prevent the occurrence of a qualifying high flow pulse which would otherwise have occurred.

9. If a pulse flow requirement for the summer large seasonal pulse is satisfied, one of the summer small seasonal pulse requirements is also considered to be satisfied.

10. If Permittee has stored water in the off-channel reservoir(s) in accordance with the terms and conditions of this permit, including any applicable environmental flow requirements in effect at the time the water was diverted from the Guadalupe River and stored in the off channel reservoir, Permittee may divert and use that stored water, even if the applicable environmental flow requirement for diversion from the Guadalupe River is not met at the time of the subsequent diversion and use of that stored water.

11. Permittee shall implement measures to minimize impacts to aquatic resources due to entrainment or impingement including, but not limited to, the installation of screens at the diversion structures within the diversion reach.

This instream use assessment was conducted using current TCEQ operation procedures and policies and available data and information. 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

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