

TCEQ Interoffice Memorandum

TO: Chief Clerk DATE: October 11, 2012

THRU: Iliana Delgado, Team Leader
Water Rights Permitting Team

FROM: Michael Gill, Project Manager
Water Rights Permitting Team

SUBJECT: Saddle Creek Development, Ltd.
Docket No. 2012-0815-WR
WRPERM 12202
CN603121567, RN105222970
Application No. 12202 for a Water Use Permit
Texas Water Code §11.143, Requiring Limited Mailed Notice
Trinity River Basin, Parker County

The Executive Director received an application from Saddle Creek Development, Ltd. seeking a Water Use Permit pursuant to Texas Water Code §11.143 and Texas Commission on Environmental Quality Rules 30 TAC §§295.1, *et seq.*

Fees and partial information were received on January 23, 2007. The application and partial information was received on March 28 and April 4, 2007. The application was declared administratively complete and filed with the Office of the Chief Clerk on May 15, 2007. The notice of the application was filed with the Chief Clerk on August 7, 2007 and notice was subsequently mailed to the downstream water right holders of record in the Trinity River Basin.

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:

Docket No. 2012-0815-WR. Consideration of the application by Saddle Creek Development LTD for a Water Use Permit (Application No. 12202) for authorization to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin, for in-place recreational use in Parker County, Texas. The reservoir has a capacity of 6.7 acre-feet and a surface area of 1.32 acres. The Applicant proposes to maintain the reservoir at a constant level with groundwater from an existing well. The commission will consider all

TO: Commissioners

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October 11, 2012

timely filed hearing requests and related responses and replies. (Michael Gill, Ross Henderson)



Michael Gill, Project Manager
Water Rights Permitting Team

Enclosures

cc: Ron Ellis, TCEQ
Ross Henderson, TCEQ
Iliana Delgado, TCEQ
Kathy Alexander, TCEQ
Stephen Densmore, TCEQ
Christopher Loft, TCEQ
Fayyaz Mughal, TCEQ
Kristin Wang, TCEQ



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF
WATER RIGHTS APPLICATION

APPLICATION NO. 12202

2007 APR 11 PM 4:48
COMMISSION
TDC WITH SUPPLY

Saddle Creek Development, Ltd. has applied for a Water Use Permit to maintain an existing dam and reservoir on Brown Branch, Trinity River Basin for in-place recreational use in Parker County. The reservoir will be kept at a constant level by use of an existing groundwater well. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Saddle Creek Development Ltd, 751 Hwy 287 N Suite 104, Mansfield, TX 76063, Applicant, seeks a Water Use Permit pursuant to Texas Water Code §11.143 and Texas Commission on Environmental Quality Rules 30 Texas Administrative Code (TAC) §295.1, *et seq.* Notice is being published and mailed to the downstream water right holders of record in the Trinity Basin pursuant to 30 TAC §295.153.

Applicant seeks authorization to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin for in-place recreational purposes in Parker County, Texas. The reservoir has a capacity of approximately 6.7 acre-feet and a surface area of 1.32 acres.

The applicant has provided evidence of an alternate source of water, which the applicant has identified as groundwater. The applicant indicates the reservoir will be maintained at a constant level with groundwater from an existing well that produces 0.0434 cfs (19.5 gpm) after a 24-hour operation test.

The reservoir is located 3.28 miles southeast from the City of Aledo at 32.6549°N Latitude and 97.5737° W Longitude, bearing N 78.1167 W°, 503 feet from the southeast corner of the William Robinson Survey, Abstract No. 1109, in Parker County Texas.

Ownership of the lands to be inundated is evidenced by Warranty Deed Document No. 608774 recorded in the Official Records of Parker County.

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

Fees and partial information were received on January 23, 2007. The application and additional information was received on March 28, 2007 and April 4, 2007. The application was accepted for filing and declared administratively complete on May 15, 2007.

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 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. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address. For additional information, individual members of the general public may contact the 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.

Issued: August 14, 2007

WATER USE PERMIT

PERMIT NO. 12202

TYPE: §11.143

Permittee: Saddle Creek Development Ltd. Address: 6031 W I-20, Suite 226
Arlington, Texas 76017

Filed: May 15, 2007 Granted:

Purpose: Recreation County: Parker

Watercourse: Brown Branch, Watershed: Trinity River Basin
tributary of the Clear Fork Trinity River,
tributary of the Trinity River

WHEREAS, Applicant seeks authorization to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin with a surface area of 1.32 acres and impound therein 6.7 acre-feet of water for recreational purposes in Parker County; and

WHEREAS, the dam and reservoir are located in the William Robinson Original Survey, Abstract No. 1109 in Parker County, Texas, 3.28 miles southeast of the City of Aledo, Texas. The centerline of the dam is located N78.1167° W, 503 feet from the southeast corner of the Robinson Survey, also being at Latitude 32.6549°N, Longitude 97.5737°W; and

WHEREAS, the applicant indicates there is to be a maintenance agreement for the Home Owners Association (HOA) that will provide for the perpetual maintenance and care of the Saddle Creek Dam. This agreement will require the owners of two (2) lots that will share direct ownership of the dam to keep the dam and rock rip rap areas clear of tree growth by mowing the dam and clearing rock rip rap areas of seedlings each year; and

WHEREAS, ownership of the lands to be inundated is evidenced by a Warranty Deed with document number 608774 recorded in the Official Records of Parker County, Texas; and

WHEREAS, pursuant to 30 Texas Administrative Code §297.42, the applicant has provided evidence of an alternate source of water, which the applicant has identified as groundwater; and

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

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

NOW, THEREFORE, Water Use Permit No. 12202 is issued to Saddle Creek Development Ltd., subject to the following terms and conditions:

1. IMPOUNDMENT

Permittee is authorized to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin in Parker County with a surface area of 1.32 acres and impound therein 6.7 acre-feet of groundwater. The dam and reservoir are located in the William Robinson Original Survey, Abstract 1109 in Parker County, 3.28 miles southeast of the City of Aledo Texas. The centerline of the dam is located N78.1167°W, 503 feet from the southeast corner of the William Robinson Original Survey, also being at Latitude 32.6549°N, Longitude 97.5737°W. Ownership of the lands to be inundated is evidenced by a Warranty Deed recorded in the official records of Parker County as document number 608774.

2. USE

Permittee is authorized to use the reservoir for recreational purposes with no right of diversion.

3. PRIORITY

The time priority for this right is May 15, 2007.

4. TIME LIMITATIONS

A. Rehabilitation of the dam for Saddle Creek Lake must be in accordance with plans approved by the Executive Director. Rehabilitation of the dam without final approval of the plans is a violation of this authorization.

B. Construction shall begin within one year of issuance of this permit and be completed within two years of the issuance of this permit, unless Permittee applies for and is subsequently granted an extension of time before the expiration of these time limitations.

C. Failure to begin construction of the proposed dam and reservoir within the period stated above shall subject all rights to this permit to forfeiture, subject to notice and hearing. After beginning construction, failure to timely construct the proposed dam and reservoir stated above shall subject this permit to cancellation in whole or in part, subject to notice and hearing.

5. SPECIAL CONDITIONS

A. This permit does not allow Permittee to impound state water. Therefore, Permittee shall provide and maintain suitable outlets in good working condition in the reservoir to pass all inflows of state water downstream. Upon termination of this permit, permittee shall activate the outlets such that no state water is impounded in the reservoir.

- B. Permittee shall maintain and operate at least one groundwater well with the capability of producing adequate quantities of groundwater to maintain the reservoir at an elevation that allows the free passage of all inflows of State Water to ensure that no State Water is used. Permittee has identified groundwater from the Paluxy Aquifer as the alternate source of water for this project.
- C. Discharge of commingled surface and ground water from the reservoir into the downstream watershed shall be of sufficient quality to meet the requirements of the *Texas Surface Water Quality Standards* (30 TAC 307) for Segment 0831.
- D. This permit is issued contingent upon the Permittee's maintenance of the alternate source of water identified in Item B above. In the event the groundwater well will not be used as the alternate source, Permittee shall immediately cease impoundment of water under this permit and either apply to amend this permit with documentation of the new alternate source of water, or voluntarily forfeit the permit. If Permittee does not amend or forfeit the permit, the Commission may begin proceeding to cancel this permit. Permittee shall notify the Commission immediately if the groundwater well(s) will not be used as the alternate source of water for permit.
- E. Permittee shall implement and maintain appropriate best management practices (BMPs) in the area surrounding the reservoir in order to minimize potential pollutant loadings through the control of sediment and nutrients. BMPs shall include but are not limited to:
 - 1. Installation and placement of erosion resistant materials in areas of high velocity flows;
 - 2. The use of sediment control barriers;
 - 3. Temporary and permanent ground cover (both natural and artificial types); and
 - 4. Proper management and control of fertilizer, herbicide, and pesticide applications.
- F. Permittee shall maintain a vegetated buffer of at least 50 feet in average width around the perimeter of the reservoir with the exception of the dam structure and reasonable access points. The buffer zone shall have a slope no greater than 15% and be planted with native vegetation at a density to ensure complete coverage at maturity.

This permit is issued subject to all superior and senior water rights in the Trinity 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 permit are denied.

This permit 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: Steve Ramos, Application Manager **Date:** February 21, 2008
Water Rights Team
Water Rights Permitting & Availability Section

From: Chris Loft, Aquatic Scientist
Resource Protection Team
Water Rights Permitting & Availability Section

Subject: Saddle Creek Development
WRPERM 12202
CN 603121567
Water Right Application No. 12202
Brown Branch, Trinity River Basin
Parker 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 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 ADDENDUM

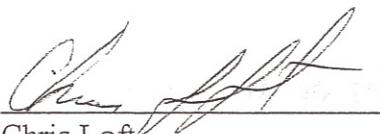
The applicant seeks authorization to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, Trinity River Basin for in-place recreational purposes in Parker County. The reservoir has a capacity of 6.7 acre-feet and a surface area of 1.32 acres. The applicant indicated the reservoir will be maintained full with groundwater.

February 21, 2008

In the August 1, 2007 environmental analysis memo, Resource Protection staff recommended three special conditions in order to minimize impact from the project. However, after subsequent discussions with the applicant, Resource Protection staff have agreed to modify Special Conditions No.1 and 2 as follows:

1. Permittee shall implement and maintain appropriate best management practices (BMPs) in the area surrounding the reservoir in order to minimize potential pollutant loadings through the control of sediment and nutrients. BMPs shall include but are not limited to:
 - a. installation and placement of erosion resistant materials in areas of high velocity flows;
 - b. the use of sediment control barriers;
 - c. temporary and permanent ground cover (both natural and artificial types); and
 - d. proper management and control of fertilizer, herbicide, and pesticide applications.
2. Permittee shall maintain a riparian vegetated buffer of at least 50 feet in average width around the perimeter of the reservoir with the exception of the dam structure and reasonable access points. The buffer zone shall have a slope no greater than 15% and planted with native vegetation at a density to ensure complete coverage at maturity.

All other analyses and recommendations in the August 1, 2007 environmental memorandum remain unchanged unless specifically addressed in this addendum.



Chris Loft

Resource Protection Team

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Steve Ramos
Water Rights Permitting Team

Date: September 14, 2007

Thru:

From: Warren D. Samuelson, P. E.
Dam Safety Program MC-174

Subject: Saddle Creek Development LTD, Application to rehabilitate and maintain a dam and reservoir, Brown Branch, Trinity River Basin, Parker County

The applicant seeks authorization to rehabilitate and maintain a dam and reservoir (Saddle Creek Lake) on Brown Branch in Parker County. The reservoir has a capacity of 8.3 acre-feet and a surface area of 1.32 acres. The reservoir will be used for recreational purposes.

The engineer, Nave Engineering, Inc., has indicated that the rehabilitated dam and spillway will be designed to pass the appropriate flood as required in Chapter 299 for a small size, low hazard dam (25% of the probable maximum flood). Staff review indicates that the proposed rehabilitation will pass 25% of the probable maximum flood.

The engineer has also indicated in a letter of December 18, 2006, that there is to be a maintenance agreement for the Home Owners Association that will require perpetual maintenance and care of the dam. According to the engineer, this agreement will require the owners of the two lots that will share direct ownership of the dam to keep the tree growth off the dam and spillway.

It is recommended that the permit include the following language:

TIME LIMITATIONS

- A. Rehabilitation of the dam for Saddle Creek Lake must be in accordance with plans approved by the Executive Director. Rehabilitation of the dam without final approval of the plans is a violation of this authorization.
- B. Construction must begin within one year of issuance of this permit and be completed within two years of issuance of the permit.
- C. Failure to commence and/or complete rehabilitation of the dam within the period stated above shall cause the authorization for use of the reservoir to expire and become null and void without further Commission

consideration unless the Permittee applies for and is subsequently granted an extension of time before the expiration of these time limitation.

The section of the permit that includes the "whereas" language should include a statement that the Permittee shall develop a written maintenance agreement that will be submitted to the homeowners association and the executive director upon completion of the rehabilitation and that the Permittee shall inform the two lots owners in writing that they are responsible for portions of the maintenance on the dam.



Warren D. Samuelson, P. E.
Dam Safety Program

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Steve Ramos, Application Manager
Water Rights Permitting Team

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

From: Fayyaz Mughal, Hydrologist
Surface Water Availability & Interstate Compacts Team

Subject: Saddle Creek Development Ltd.,
WRPERM 12202
Brown Branch, Trinity River Basin
Parker County

August 21, 2007

WATER AVAILABILITY REVIEW

Application Summary

The applicant is seeking an authorization to modify and maintain an existing dam and reservoir located on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin, in Parker County, for in-place recreational purposes. The reservoir has a capacity of approximately 6.7 acre-feet and a surface area of 1.32 acres.

The applicant has provided evidence of an alternate source of water, which the applicant has identified as groundwater. The applicant indicates that the reservoir will be maintained at a constant level with an existing well that produces 19.5 gpm or 31.39 acre-feet per year after a 24-hour operation test. The applicant will not be diverting from the reservoir and groundwater will be used to compensate for evaporative losses and maintain the reservoir full.

Water Availability Review

TCEQ Resource Protection staff did not recommend instream flow restrictions for this application.

Because the applicant does not request state water and will use groundwater to maintain the level of the reservoir and compensate for evaporative losses, a water availability analysis is not necessary for this application. However, the application must be reviewed to ensure that

the alternate source is of sufficient quantity to compensate for evaporative losses. To do this, staff used evaporation data from the Commission's water availability model (WAM) for the Trinity River Basin, Quadrangle 510. Based on 57 years of evaporation data the maximum evaporative losses would be 6.16 acre-feet per year.

Conclusion

Because the applicant indicates that the reservoir will be maintained using groundwater as an alternate source, staff can recommend granting this application if the permit contains the following special conditions:

1. This permit does not allow permittee to impound state water. Therefore, Permittee shall provide and maintain suitable outlets in good working condition in the reservoirs to pass all inflows of state water downstream. Upon termination of this permit, permittee shall activate the outlets such that no state water is impounded in the reservoirs.
2. Permittee shall maintain and operate an alternative source of water with sufficient production to compensate for use of State Water. Permittee has identified groundwater from the Paluxy Aquifer as the alternative source of water for this project.
3. This permit is issued contingent upon the Permittee's maintenance of the alternate source of water identified in Item #2 above. In the event the groundwater well will not be used as the alternative source, Permittee shall immediately cease impoundment of water under this permit and either apply to amend this permit with documentation of the new alternative source of water, or voluntarily forfeit the permit. If Permittee does not amend or forfeit the permit, the Commission may begin proceedings to cancel this permit. The Commission shall be notified immediately by the Permittee if the groundwater well(s) will not be used as the alternative source of water for this permit.



Fayyaz Mughal
Hydrologist

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Steve Ramos, Project Manager
Water Rights Team

Date: August 1, 2007

Through: Bill Billingsley, Team Leader
Resource Protection Team

WB
8-1-07 Wendy Gordon, Ph.D., Aquatic Scientist
Resource Protection Team

From: John Botros, Aquatic Scientist
Resource Protection Team

Subject: Saddle Creek Development L.L.C, Application 12202
Brown Branch, Trinity River Basin
Parker 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 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.

Application Summary: Applicant seeks authorization to modify and maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, Trinity River Basin for in-place recreational purposes in Parker County. The reservoir has a capacity of approximately 6.7 acre-feet and a surface area of 1.32 acres.

The applicant has provided evidence of an alternate source of water, which the applicant has identified as groundwater. The applicant indicates the reservoir will be maintained at a constant level with groundwater from an existing well that produces 0.0434 cfs (19.5 gpm) after a 24-hour operation test.

Aquatic and Riparian Habitats: The applicant reservoir is located on Brown Branch approximately 0.6 stream miles upstream of the Clear Fork Trinity River (Clear Fork). According to the *Handbook of Texas Online*, the upper reaches the stream [Clear Fork] traverses flat to rolling terrain surfaced by deep, fine sandy loams that support hardwood forest, brush, and grasses. The terrain southeast of Weatherford Lake is variable and surfaced by shallow, stony, clay loams. For most of the area's history the land that surrounds the Clear Fork has been used as range and crop land. Based on USGS topographical maps (Aledo quadrangle), Brown Branch is a small first order

intermittent stream. There are several impoundments existing both upstream and downstream of the applicant's reservoir on Brown Branch. Based on aerial imagery, riparian habitats within the immediate project area are extremely sparse, but the riparian corridor along Brown Branch appears to increase in width and density downstream of the applicant's location down to the Clear Fork Trinity River (Figure 1).



Figure 1: Aerial image of project site showing the reservoir, Brown Branch, Clear Fork Trinity and associated riparian corridors

Riparian zones are an integral part of aquatic ecosystems and a landscape component that has to function well if rivers are to maintain their ecological vitality in the long term (Nilsson and Svedmark 2002). Riparian areas are transitional zones between terrestrial and aquatic ecosystems and are distinguished by gradients in biophysical conditions, ecological processes, and biota. They are

areas through which surface and subsurface hydrology connect waterbodies with their adjacent uplands. They include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (NRC 2002). Riparian areas provide many important functions including streamflow maintenance, nutrient cycling, chemical and other pollutant filtering, sediment trapping and redistribution, floodwater absorption and detention, fish and wildlife habitat and food provision for a wide range of biota (Naiman and Decamps 1997, Fischenich and Allen 2000, NRC 2002). Riparian buffer zones function most effectively when the following conditions are met:

- Minimum width of fifty (50) feet (Walsh et al. 1997, Fischenich and Allen 2000, EPA 2005)
- Gentle slope (5 %; maximum slope 15%) to allow sheet flow (Walsh et al. 1997, NRC 2002, EPA 2005)
- Dense vegetation (Nilsson and Svedmark 2002, NRC 2002)
- Vegetation composed of native species (EPA 2005)

Furthermore, the applicant has proposed measures to account for inflows of State water and to maintain the reservoir with an alternate source of water thereby allowing the free passage of State water. Instream flow restrictions are not recommended in this case. However, staff recommends that a riparian buffer of at least 50 feet in average width be maintained around the reservoir perimeter and the riparian area downstream of the reservoir be maintained intact.

Water Quality: The existing impoundment on Brown Branch is located approximately 0.6 stream miles upstream of the Clear Fork Trinity River designated Classified Segment 0831 in the *Atlas of Texas Surface Waters*. Segment 0831 extends from a point 200 meters downstream of US 377 in Tarrant County (near Lake Benbrook) to Weatherford Dam in Parker County. Water body uses include high aquatic life use, contact recreation, and public water supply. According to the *2006 State of Texas Water Quality Inventory, 305(b)/303(d) Report*, Segment 0831 partially supports the aquatic life use in the segment from a point two miles upstream of the confluence with the South Fork Trinity River to the Lake Weatherford Dam due to depressed dissolved oxygen levels. The segment has been on the 303(d) List of threatened or impaired water bodies since 1996. Other uses are fully supported although there is concern for elevated orthophosphorus levels downstream of the confluence with the South Fork Trinity River.

The project presents the potential of having adverse water quality conditions due to the construction of the housing development around the existing impoundment and using the reservoir as a sink for new non-point source pollution. The transport and discharge of pollutants into water bodies are often associated with storm water runoff. Based on the information provided, no temporary or permanent best management practices (BMPs) have been identified to be implemented in this project. Staff recommends that BMPs be developed and maintained on the property such as seeding and/or sodding with natural or artificial ground cover to protect slopes and establish vegetation on any disturbed area, install rip-rap at storm sewer outfalls and in channels with excessive velocities, and slope paving on steeper slopes as necessary.

The applicant proposes to maintain the reservoir at constant elevation using groundwater withdrawn from the Paluxy aquifer from a well located on site drilled to a depth of 190 feet. The following data regarding the groundwater chemistry were submitted based on a sample from the well.

pH	7.1
Total dissolved solids (mg/L)	382
Chloride (mg/L)	13.4
Sulfate (mg/L)	62.1
Temperature (°F)	68

A review of the groundwater well database maintained by the Texas Water Development Board (TWDB) finds nine wells within a four mile radius of the project with chemistry data available for the Paluxy aquifer (Table 1). It should be noted that Table 1 only includes data for selected parameters for which numeric surface water quality criteria are available.

Table 1: Groundwater Quality Data from TWDB

Owner	State well ID	Depth (feet)	Date Sampled			Water Quality Parameters			pH
			month	day	year	Cl ⁻¹ (mg/L)	SO ₄ ⁻² (mg/L)	TDS (mg/L)	
Lassiter Addition	3220403	300	6	28	1983	10	27	283	8
City of Aledo	3220405	240	10	11	1965	4	25	255	7.5
			12	30	1966	10	26	253	7.5
			12	27	1967	12	33	282	7.4
			5	10	1970	9	26	271	7.4
			1	29	1975	13	34	311	8.3
City of Aledo	3220406	332	3	25	1971	8	32	282	7.4
Aledo Mobile Home	3220407	240	11	30	1976	16	40	337	7.6
N. Robbins	3220408	158	3	7	1950	10	14	314	7.1
Veale Ranch	3220501	377	11	8	1950	11	45	332	7.9
			3	22	1978	13	55	339	7.4
			6	27	1983	14	58	349	8.3
Chester Wiley	3220801	168	3	6	1950	14	46	345	7.3
			3	22	1978	12	45	338	7.7
A.T. Watts	3228301	210	8	5	1976	12	55	418	8.4
A.T. Watts	3228302	198	7	10	1989	12	52	384	7.1

Based on these limited historical data from TWDB, groundwater from the Paluxy aquifer in this area contains average concentrations of chlorides, sulfates, and total dissolved solids of 11.25 mg/L, 38.3

mg/L, and 318.3 mg/L, respectively. Average concentrations of these constituents are within the allowable water quality standards (100, 100, and 500 mg/L, respectively) for Segment 0831. Discharges of groundwater from this source are not expected to result in adverse impacts to the water quality of Brown Branch or Segment 0831 due to concentrations of these constituents.

Bay and Estuary Freshwater Inflows: Freshwater inflows are critical for maintaining the historical productivity of bays and estuaries along the Gulf Coast. Lake Lavon is located more than 200 river miles from the coast. Staff does not expect the proposed permit to have a significant impact on the Trinity/San Jacinto estuary.

Recreational Uses: Other than the proposed amenity use of the impoundment on the property, there are no known recreational or public uses of the stream.

Summary and Conclusions: Applicant seeks authorization to maintain an existing dam and reservoir on Brown Branch, Trinity River Basin for in-place recreational purposes in Parker County. The reservoir has a capacity of 6.7 acre-feet with a surface area of 1.66 acres.

In order to maintain the instream uses and water quality of Brown Branch and downstream areas including Segment 0831, staff recommends the following special conditions be adopted into Water Use Permit 12202, if granted:

1. Permittee shall implement and maintain appropriate best management practices (BMPs) on the property to minimize potential pollutant loadings through the control of sediment and nutrients. BMPs shall include but are not limited to:
 - a. installation and placement of erosion resistant materials in areas subject to high velocity flows;
 - b. the use of sediment control barriers;
 - c. temporary and permanent ground cover (both natural and artificial types); and
 - d. proper management and control of fertilizer, herbicide, and pesticide applications.
2. Permittee shall maintain a riparian vegetated buffer of at least 50 feet in average width around the perimeter of the reservoir with the exception of reasonable access points. The buffer zone shall have a slope no greater than 5% and planted with native vegetation at a density to ensure complete coverage at maturity. Permittee shall preserve and maintain the riparian area downstream of the existing reservoir along Brown Branch to the extent practicable.
3. Permittee shall maintain and operate at least one groundwater well with the capability of producing adequate quantities of groundwater in order to maintain the reservoir at an elevation that allows the free passage of all inflows of State water. Discharge of commingled surface and ground waters from the reservoir into the downstream watershed shall be of sufficient quality to meet the requirements of the *Texas Surface Water Quality Standards (30 TAC 307)* for Segment 0831.

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

- Environmental Protection Agency. 2005. National Management Measures to Protect and Restore Wetlands and Riparian Areas for the Abatement of Nonpoint Source Pollution. EPA-841-B-05-003.
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Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Steve Ramos, Application Manager **Date:** April 20, 2007
Water Rights Permitting Team
Water Supply Division

Thru: Bill Billingsley, Team Leader
Resource Protection Team BS 4/24/07
Water Supply Division

From: Kristin Wang, Senior Water Conservation Specialist KW 4/20/07
Resource Protection Team
Water Supply Division

Subject: Saddle Creek Development Ltd
WR No. 12202
CN603121567
Administrative Completeness Review

Applicant seeks authorization to maintain an existing dam and reservoir on Brown Branch, tributary of the Clear Fork Trinity River, tributary of the Trinity River, Trinity River Basin for in-place recreational use in Parker County. The reservoir has a capacity of approximately 8.3 acre-feet and a surface area of 1.32 acre-feet. The lake will be kept at a constant level by use of an existing groundwater well.

A water conservation and drought contingency plan is required to be submitted with an application for the consumptive use of state water 30 Tex. Admin. Code Section 295.9(3). However, there is no consumptive use associated with this requested appropriation. The water conservation and drought contingency plan requirement is therefore not applicable with this application. This is consistent with historical reviews for non-consumptive uses of state water.

The request is not inconsistent with the approved 2006 Region C and 2007 State Water Plan.

No further review is required by the conservation staff of the Resource Protection Team.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. From the first European settlers to the present day, the nation has evolved through various stages of development.

In the early years, the colonies were established as separate entities, each with its own local government and customs. However, as the population grew and the colonies became more interconnected, a sense of shared identity began to emerge.

The American Revolution was a pivotal moment in the nation's history. It was a struggle for independence from British rule, fought between 1775 and 1783. The revolution resulted in the birth of a new nation, the United States of America.

The early years of the United States were marked by westward expansion and the discovery of gold in California. This period of growth and discovery led to the formation of new states and the expansion of the nation's territory.

The Civil War, fought between 1861 and 1865, was a defining moment in the nation's history. It was a struggle over the issue of slavery, which ultimately resulted in the abolition of slavery and the preservation of the Union.

The Reconstruction era, which followed the Civil War, was a period of significant change and challenge. It was a time when the nation sought to rebuild and reunite, but it was also a time of conflict and struggle.

The late 19th and early 20th centuries were a time of rapid industrialization and technological advancement. This period saw the rise of big business and the growth of the United States as a world power.

The World War era, which included the years 1914-1918 and 1939-1945, was a period of global conflict and upheaval. The United States emerged from these wars as a superpower, with a significant role in shaping the world.

The post-World War II era has been a time of significant change and challenge. It has seen the rise of the Cold War, the Vietnam War, and the civil rights movement. The United States continues to play a major role in the world, and its history remains a source of inspiration and guidance for the future.