TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF AN APPLICATION TO AMEND A WATER USE PERMIT

APPLICATION NO. 5585A

Nacogdoches County has applied to amend Water Use Permit No. 5585 to authorize diversion and use of up to 4,750 acre-feet of water from the perimeter of Lake Naconiche, Neches River Basin for municipal, industrial, and agricultural purposes in Nacogdoches County and to modify Paragraph 4.d. of the Permit to conform with the adopted environmental flow standards in Title 30 Texas Administrative Code Chapter 298. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Nacogdoches County, 101 West Main Street, Nacogdoches, TX 75961, Applicant, has applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment to a Water Use Permit pursuant to Texas Water Code (TWC) §11.122 and TCEQ Rule Title 30 Texas Administrative Code (TAC) §§ 295.1, *et seq.* Notice is being published and mailed to the water right holders of record in the Neches River Basin pursuant to Title 30 TAC § 295.158(b)(2).

Water Use Permit No.5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion.

The Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs;"

Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from Naconiche Creek and the diversion point is identified as a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

The diversion point is identified as anywhere along the perimeter of Lake Naconiche with the centerline of Lake Naconiche dam being located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County, ZIP Code 75946.

Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original permit to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 TAC Chapter 298.

The application and fees were received on January 20, 2016. Additional fees and information were received on November 15, 2016. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on April 25, 2017. Additional

information was received on April 5 and July 19, 2019.

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

PUBLIC COMMENT / PUBLIC MEETING. Written public comments and requests for a public meeting should be submitted to the Office of the Chief Clerk, at the address provided in the information section below, 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 or electronically at https://www14.tceq.texas.gov/epic/eComment/ by entering WRPERM 5585 in the search field. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address.

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

Issued: November 23, 2022

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AMENDMENT TO A WATER USE PERMIT

PERMIT NO. 5585A TYPE § 11.122

Permittee: Nacogdoches County Address: 101 West Main Street

Nacogdoches, TX 75961

Filed: April 25, 2017 Granted:

Purposes: Flood Control, Recreation, County: Nacogdoches

Agricultural, Industrial, &

Municipal

Watercourse: Naconiche Creek tributary of Basin: Neches River Basin

Attoyac Bayou, tributary of the

Angelina River

WHEREAS, Water Use Permit No. 5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin, and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion; and

WHEREAS, the Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs," and

WHEREAS, Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County; and

WHEREAS, the diversion point is identified as anywhere along the perimeter of Lake Naconiche with the centerline of Lake Naconiche dam being located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County; and

WHEREAS, Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original Permit to conform to the adopted environmental flow standards in TCEQ's administrative rules in Title 30 Texas Administrative Code Chapter 298; and

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

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

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

NOW, THEREFORE, this amendment to Water Use Permit No. 5585, designated Water Use Permit No. 5585A, is issued to Nacogdoches County (Permittee) subject to the following terms and conditions:

1. USE

In addition to previous authorizations, Permittee is authorized to divert and use not to exceed 4,750 acre-feet of water per year from Lake Naconiche on Naconiche Creek, Neches River Basin, for municipal, industrial, and agricultural purposes in Nacogdoches County.

DIVERSION

- A. Permittee is authorized to divert from a point anywhere along the perimeter of Lake Naconiche, identified by the centerline of the dam and located at Latitude 31.766972° N, Longitude 94.573865° W. in Nacogdoches County.
- B. Maximum diversion rate: 26.2 cfs (11,771 gpm).

PRIORITY

- A. The time priority for the diversion of 4,750 acre-feet of water per year is April 25, 2017.
- B. The time priority for the impoundment is April 30, 1997.

4. CONSERVATION

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

5. SPECIAL CONDITIONS

- A. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure.
- B. The instream flow requirements in Paragraphs 5.E. 5.I. of this amendment apply to both diversion and impoundment of water under the permit, as amended, and replace the requirements in Paragraph 4.d. of the original permit.
- C. For purposes of applying the environmental flow requirements in Paragraphs 5.E. 5.I. of this amendment, Permittee's measurement point shall be the dam at Lake Naconiche.
- D. Notwithstanding the requirements set out in Paragraphs 5.E. 5.I. of this amendment, if Permittee has stored water in accordance with the terms and conditions of the permit, as amended, at the time the water was stored, Permittee may divert and use that stored water, even if any environmental flow requirements are not met at the time of the subsequent diversion and use of that stored water. Permittee is not required to release previously stored water to meet the environmental flow requirements in this amendment.
- E. Permittee may only divert or impound water when streamflow exceeds the following environmental flow values at Permittee's measurement point, subject to the requirements of Paragraphs 5.F. 5.I. below.

Season	Subsistence	Base
Winter	1.2 cfs	6.1 cfs
Spring	0.4 cfs	2.0 cfs
Summer	0.2 cfs	0.9 cfs
Fall	0.4 cfs	1.1 cfs

cfs = cubic feet per second

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

Subsistence Flow Special Conditions

- G. Permittee shall not divert or impound water if streamflow at Permittee's measurement point is below the applicable subsistence flow value for a season.
- H. If streamflow at Permittee's measurement point is above the applicable subsistence flow value for a season but below the applicable base flow value for a season, Permittee may divert or impound water unless streamflow at Permittee's measurement point falls below the applicable subsistence flow value.

Base Flow Special Conditions

- I. If streamflow at Permittee's measurement point is above the applicable base flow value for a season, Permittee may divert or impound water so long as the streamflow at Permittee's measurement point does not fall below the applicable base flow standard.
- J. Consistent with and subject to the conditions stated in Texas Water Code §11.147(e1), the commission may adjust the environmental flow conditions in this permit to provide for the protection of instream flows or freshwater inflows to the bay and estuary, 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).
- K. 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 Paragraph 2. DIVERSION.
- L. Permittee shall demonstrate compliance with the terms and conditions of this amendment by maintaining records of the daily volume of water stored in and diverted from Lake Naconiche, and the daily streamflow releases from the dam at Lake Naconiche.
- M. Permittee shall allow representatives of the Texas Commission on Environmental Quality reasonable access to the property to inspect the measuring device and records.

This amendment is issued subject to all terms, conditions, and provisions contained in Water Use Permit No. 5585, except as specifically amended herein.

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

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

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

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

	For the Commission
Date Issued:	

Sara Thornton <
Thu 11/17/2022 1:07 PM

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

Cc: Ashley Rich >;Yvette Wilkerson

Thank you Dr. Beerman, appreciate your assistance on this application.

Sara

SARA THORNTON

Principal

512 322 5876 Direct

Lloyd Gosselink Rochelle & Townsend, P.C.

816 Congress Ave., Suite 1900, Austin, TX 78701

| 512-322-5800

RE: Nacogdoches_County_5585A_Draft_Amendment_Notice_Revisions_11.16.2022

****ATTENTION TO PUBLIC OFFICIALS AND OFFICIALS WITH OTHER INSTITUTIONS SUBJECT TO THE OPEN MEETINGS ACT

A "REPLY TO ALL" OF THIS EMAIL COULD LEAD TO VIOLATIONS OF THE TEXAS OPEN MEETINGS ACT. PLEASE REPLY ONLY TO LEGAL COUNSEL.

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Nacogdoches_County_5585A_Draft_Amendment_Notice_Revisions_11.16.2022

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

Wed 11/16/2022 3:03 PM

To: Sara Thornton <

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

Ms. Sara Thornton:

I have revised your comments regarding the draft amendment/notice for Nacogdoches County, WRPERM No. 5585A. I have attached Redline documents for WRPERM No. 5585's Notice and Amendment for your review. Thank you for catching the typographic errors.

The drafts have been revised as follows:.

- 1. While the reference to the diversion point along the perimeter of Lake Naconiche is in the previous paragraph, we have accepted the requested language.
- 2. Edit accepted.
- 3. While the requested reference to diverting from the perimeter of Lake Naconiche is addressed in the previous WHEREAS clause, we have accepted the requested language.
- 4. Edit accepted
- 5. The current amendment authorization for 2.A. has same language as your recommendation. Therefore, no change will be made to the Draft Amendment's 2.A.

Thank you for your comments. I am readying the documents to send to Notice. Sincerely,

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF AN APPLICATION TO AMEND A WATER USE PERMIT

APPLICATION NO. 5585A

Nacogdoches County has applied to amend Water Use Permit No. 5585 to authorize diversion and use of up to 4,750 acre-feet of water from the perimeter of Lake Naconiche, Neches River Basin for municipal, industrial, and agricultural purposes in Nacogdoches County and to modify Paragraph 4.d. of the Permit to conform with the adopted environmental flow standards in Title 30 Texas Administrative Code Chapter 298. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Nacogdoches County, 101 West Main Street, Nacogdoches, TX 75961, Applicant, has applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment to a Water Use Permit pursuant to Texas Water Code (TWC) §11.122 and TCEQ Rule Title 30 Texas Administrative Code (TAC) §§ 295.1, *et seq.* Notice is being published and mailed to the water right holders of record in the Neches River Basin pursuant to Title 30 TAC §295.158(b)(2).

Water Use Permit No.5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion.

The Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs;"

Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from Naconiche Creek and the diversion point is identified as a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

The diversion point is identified <u>as anywhere along the perimeter of Lake Naconiche with by a point on</u> the centerline of <u>Lake Naconiche the</u> dam <u>being and is</u> located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County, ZIP Code 75946.

Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original permit to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 TAC Chapter 298.

The application and fees were received on January 20, 2016. Additional fees and information were received on November 15, 2016. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on April 25, 2017. Additional information was received on April 5 and July 19, 2019.

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

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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.

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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.texas.gov. Si desea información en Español, puede llamar al 1-800-687-4040 o por el internet al http://www.tceq.texas.gov.

Issued:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AMENDMENT TO A WATER USE PERMIT

PERMIT NO. 5585A TYPE § 11.122

Permittee: Nacogdoches County Address: 101 West Main Street

Nacogdoches, TX 75961

Filed: April 25, 2017 Granted:

Purposes: Flood Control, Recreation, County: Nacogdoches

Agricultural, Industrial, &

Municipal

Watercourse: Naconiche Creek tributary of Basin: Neches River Basin

Attoyac Bayou, tributary of the

Angelina River

WHEREAS, Water Use Permit No._5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin, and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion; and

WHEREAS, the Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs;" and

WHEREAS, Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County; and

WHEREAS, the diversion point is identified <u>as anywhere along the perimeter of Lake Naconiche withby a point on</u> the centerline of <u>Lake Naconichethe</u> dam <u>being and is</u>-located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County; and

WHEREAS, Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original Permit to conform to the adopted environmental flow standards in TCEQ's administrative rules in Title 30 Texas Administrative Code Chapter 298; and

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

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

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

NOW, THEREFORE, this amendment to Water Use Permit No. 5585, designated Water Use Permit No. 5585A, is issued to Nacogdoches County (Permittee) subject to the following terms and conditions:

1. USE

In addition to previous authorizations, Permittee is authorized to divert and use not to exceed 4,750 acre-feet of water per year from Lake Naconiche on Naconiche Creek, Neches River Basin, for municipal, industrial, and agricultural purposes in Nacogdoches County.

2. DIVERSION

- A. Permittee is authorized to divert from a point anywhere along the perimeter of Lake Naconiche, identified by the centerline of the dam and located at Latitude 31.766972° N, Longitude 94.573865° W. in Nacogdoches County.
- B. Maximum diversion rate: 26.2 cfs (11,771 gpm).

PRIORITY

- A. The time priority for the diversion of 4,750 acre-feet of water per year is April 25, 2017.
- B. The time priority for the impoundment is April 30, 1997.

4. CONSERVATION

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

5. SPECIAL CONDITIONS

- A. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure.
- B. The instream flow requirements in Paragraphs 5.E. 5.I. of this amendment apply to both diversion and impoundment of water under the permit, as amended, and replace the requirements in Paragraph 4.d. of the original permit.
- C. For purposes of applying the environmental flow requirements in Paragraphs 5.E. 5.I. of this amendment, Permittee's measurement point shall be the dam at Lake Naconiche.
- D. Notwithstanding the requirements set out in Paragraphs 5.E. 5.I. of this amendment, if Permittee has stored water in accordance with the terms and conditions of the permit, as amended, at the time the water was stored, Permittee may divert and use that stored water, even if any environmental flow requirements are not met at the time of the subsequent diversion and use of that stored water. Permittee is not required to release previously stored water to meet the environmental flow requirements in this amendment.
- E. Permittee may only divert or impound water when streamflow exceeds the following environmental flow values at Permittee's measurement point, subject to the requirements of Paragraphs 5.F. 5.I. below.

Season	Subsistence	Base
Winter	1.2 cfs	6.1 cfs
Spring	0.4 cfs	2.0 cfs
Summer	0.2 cfs	0.9 cfs
Fall	0.4 cfs	1.1 cfs

cfs = cubic feet per second

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

Subsistence Flow Special Conditions

- G. Permittee shall not divert or impound water if streamflow at Permittee's measurement point is below the applicable subsistence flow value for a season.
- H. If streamflow at Permittee's measurement point is above the applicable subsistence flow value for a season but below the applicable base flow value for a season, Permittee may divert or impound water unless streamflow at Permittee's measurement point falls below the applicable subsistence flow value.

Base Flow Special Conditions

- I. If streamflow at Permittee's measurement point is above the applicable base flow value for a season, Permittee may divert or impound water so long as the streamflow at Permittee's measurement point does not fall below the applicable base flow standard.
- J. Consistent with and subject to the conditions stated in Texas Water Code §11.147(e1), the commission may adjust the environmental flow conditions in this permit to provide for the protection of instream flows or freshwater inflows to the bay and estuary, 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).
- K. 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 Paragraph 2. DIVERSION.
- L. Permittee shall demonstrate compliance with the terms and conditions of this amendment by maintaining records of the daily volume of water stored in and diverted from Lake Naconiche, and the daily streamflow releases from the dam at Lake Naconiche.
- M. Permittee shall allow representatives of the Texas Commission on Environmental Quality reasonable access to the property to inspect the measuring device and records.

This amendment is issued subject to all terms, conditions, and provisions contained in Water Use Permit No. 5585, except as specifically amended herein.

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

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

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

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

	For the Commission	
Date Issued:		



816 Congress Avenue, Suite 1900 Austin, Texas 78701 512.322.5800 p 512.472.0532 f

lglawfirm.com

Ms. Thornton's Direct Line: (512) 322-5876



November 9, 2022

Water Availability Division

Dr. Lillian E. Beerman (MC 160) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 VIA ELECTRONIC TRANSMISSION AND FIRST-CLASS MAIL

Re:

Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Requiring Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Dr. Beerman:

Please find enclosed the comments of my client, Nacogdoches County (the "County"), to the Executive Director's October 26, 2022¹ draft permit (the "Draft Permit"), draft notice (the "Draft Notice") and technical memorandums prepared for the above-referenced application. Before providing these comments, the County would like to express its appreciation for the effort of you and your staff in preparing the Draft Permit. Having reviewed the Draft Permit, Draft Notice and associated technical memorandums, the County offers the following comments for your consideration.

1. Draft Notice, 6th Paragraph, Page 1

In this paragraph, the diversion point should be identified as anywhere along the perimeter of Lake Naconiche. The County requests this paragraph be revised as follows:

The diversion point is identified as anywhere along the perimeter of Lake Naconiche with the centerline of the Lake Naconiche dam being located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County, ZIP Code 75946.

2. Draft Permit, Page 1, 1st Paragraph

¹ The letter was actually dated October 26, 2021, but should have been dated October 26, 2022.

Dr. Lillian E. Beerman November 9, 2022 Page 2

In the first line of this "WHEREAS" paragraph, a space needs to be added in the first line between No. and 5585.

3. Draft Permit, Page 1, 4th Paragraph

In this "WHEREAS" paragraph, the diversion point should be identified as anywhere along the perimeter of Lake Naconiche. The County requests this paragraph be revised as follows:

WHEREAS, the diversion point is identified as anywhere along the perimeter of Lake Naconiche with the centerline of the Lake Naconiche dam being located at Latitude 31.766972 N, Longitude 94.573865 W in Nacogdoches County; and

4. Draft Permit, Page 2, 5th Paragraph

In the first line of the "NOW, THEREFORE" paragraph, a period needs to be added after "No" in "Water Use Permit No 5855."

5. Draft Permit, Page 2, Paragraph 2.A.

In Paragraph 2.A, the diversion point is not clearly identified as anywhere along the perimeter of Lake Naconiche. The County requests this paragraph be revised as follows:

Permittee is authorized to divert from a point anywhere along the perimeter of Lake Naconiche with the centerline of the Lake Naconiche dam being located at Latitude 31.766972 N, Longitude 94.573865 W in Nacogdoches County.

We very much appreciate your efforts and the efforts of your staff in preparing the Draft Permit and look forward to discussing these proposed changes at your earliest convenience. Should you have any questions regarding these proposed revisions, I hope you will feel free to call me.

Sincerely,

Sara R. Thornton

fra & A

cc: Mr. John Fleming

Ms. Brooke McGregor

Dr. Kathy Alexander

Ms. Simone Kiel

Mr. Jordan Skipwith

Ms. Ashley Rich

Application No. 5585A to Amend Water Use Permit No. 5585

Ashley Rich <			
Wed 11/9/2022 11:18 AM			
To: Lillian Beerman <lillian.beerman@tceq.texas.gov></lillian.beerman@tceq.texas.gov>			
Cc: John Fleming ;jordan.skipv ;jordan.skipv ;jordan.skipv ;jordan.skipv ;Kathy Alexander <kathy.alexander@tceq.texas.gov>;Brooke McGregor </kathy.alexander@tceq.texas.gov>			
1 attachments (56 KB) 2022.11.9 SRT to L Beerman commenting on Draft Permit 5585A Nacogdoches County(8502587.3).pdf;			
Good morning,			
Please see the attached letter sent on behalf of Sara R. Thornton. If you have any problems opening the attachment, please let me know.			
Thank you.			
ASHLEY RICH Attorney 512-322-5816 Direct Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Ave., Suite 1900, Austin, TX 78701			
Your text here!			

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Ms. Thornton's Direct Line: (512) 322-5876

November 9, 2022

Dr. Lillian E. Beerman (MC 160) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 VIA ELECTRONIC TRANSMISSION AND FIRST-CLASS MAIL

Re: Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585 Texas Water Code § 11.122, Requiring Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Dr. Beerman:

Please find enclosed the comments of my client, Nacogdoches County (the "County"), to the Executive Director's October 26, 2022¹ draft permit (the "Draft Permit"), draft notice (the "Draft Notice") and technical memorandums prepared for the above-referenced application. Before providing these comments, the County would like to express its appreciation for the effort of you and your staff in preparing the Draft Permit. Having reviewed the Draft Permit, Draft Notice and associated technical memorandums, the County offers the following comments for your consideration.

1. Draft Notice, 6th Paragraph, Page 1

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¹ The letter was actually dated October 26, 2021, but should have been dated October 26, 2022.

Dr. Lillian E. Beerman November 9, 2022 Page 2

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3. Draft Permit, Page 1, 4th Paragraph

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WHEREAS, the diversion point is identified as anywhere along the perimeter of Lake Naconiche with the centerline of the Lake Naconiche dam being located at Latitude 31.766972 N, Longitude 94.573865 W in Nacogdoches County; and

4. Draft Permit, Page 2, 5th Paragraph

In the first line of the "NOW, THEREFORE" paragraph, a period needs to be added after "No" in "Water Use Permit No 5855."

5. Draft Permit, Page 2, Paragraph 2.A.

In Paragraph 2.A, the diversion point is not clearly identified as anywhere along the perimeter of Lake Naconiche. The County requests this paragraph be revised as follows:

Permittee is authorized to divert from a point anywhere along the perimeter of Lake Naconiche with the centerline of the Lake Naconiche dam being located at Latitude 31.766972 N, Longitude 94.573865 W in Nacogdoches County.

We very much appreciate your efforts and the efforts of your staff in preparing the Draft Permit and look forward to discussing these proposed changes at your earliest convenience. Should you have any questions regarding these proposed revisions, I hope you will feel free to call me.

Sincerely,

Sara R. Thornton

Sook &

cc: Mr. John Fleming

Ms. Brooke McGregor

Dr. Kathy Alexander

Ms. Simone Kiel

Mr. Jordan Skipwith

Ms. Ashley Rich

Nacogdoches_County_5585A_Draft_Amendment_10.26.2022

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

Wed 10/26/2022 9:35 AM

To: STHORNTON

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

Ms. Sara Thornton, Esq.

The draft amendment and notice for Nacogdoches County's Application No. 5585A to amend WRPERM 5585 is ready for review. The drafts are attached.

Please provide comments by COB Wednesday, November 9, 2022.

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

Thank you,

Lillian E. Beerman, Ph.D. Water Rights Permitting Team Water Availability Division 512-239-4019

lillian.beerman@tceq.texas.gov

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 26, 2021

Sara R. Thornton Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Avenue, Suite 1900 Austin, Texas 78701 VIA E-MAIL

RE: Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Requiring Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Ms. Thornton:

Drafts, subject to revision, of the public notice, proposed amendment to Water Use Permit No. 5585, and the related technical memoranda are attached.

Staff is recommending that the referenced application be granted in accordance with the attached drafts. Please review the drafts and contact me no later than November 9, 2022 with any comments or questions as the notice will be forwarded to the Office of the Chief Clerk for mailing after that date.

Please note this application requires a 30-day comment period and once the comment period has closed, the proposed amendment to Water Use Permit No. 5585 may be issued as drafted given no hearing requests are received.

If you have questions concerning this application, please contact me via e-mail at lillian.beerman@tceq.texas.gov or by phone at 512-239-4019.

Sincerely,

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

Lillian C. Beerman, Ph.D.

Water Rights Permitting Team

Water Rights Permitting and Availability Section

Attachments

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AMENDMENT TO A WATER USE PERMIT

PERMIT NO. 5585A TYPE § 11.122

Permittee: Nacogdoches County Address: 101 West Main Street

Nacogdoches, TX 75961

Filed: April 25, 2017 Granted:

Purposes: Flood Control, Recreation, County: Nacogdoches

Agricultural, Industrial, &

Municipal

Watercourse: Naconiche Creek tributary of Basin: Neches River Basin

Attoyac Bayou, tributary of the

Angelina River

WHEREAS, Water Use Permit No.5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin, and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion; and

WHEREAS, the Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs," and

WHEREAS, Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County; and

WHEREAS, the diversion point is identified by a point on the centerline of the dam and is located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County; and

WHEREAS, Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original Permit to conform to the adopted environmental flow standards in TCEQ's administrative rules in Title 30 Texas Administrative Code Chapter 298; and

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

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

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

NOW, THEREFORE, this amendment to Water Use Permit No 5585, designated Water Use Permit No. 5585A, is issued to Nacogdoches County (Permittee) subject to the following terms and conditions:

USE

In addition to previous authorizations, Permittee is authorized to divert and use not to exceed 4,750 acre-feet of water per year from Lake Naconiche on Naconiche Creek, Neches River Basin, for municipal, industrial, and agricultural purposes in Nacogdoches County.

DIVERSION

- A. Permittee is authorized to divert from a point anywhere along the perimeter of Lake Naconiche, identified by the centerline of the dam and located at Latitude 31.766972° N, Longitude 94.573865° W. in Nacogdoches County.
- B. Maximum diversion rate: 26.2 cfs (11,771 gpm).

3. PRIORITY

- A. The time priority for the diversion of 4,750 acre-feet of water per year is April 25, 2017.
- B. The time priority for the impoundment is April 30, 1997.

4. CONSERVATION

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

5. SPECIAL CONDITIONS

- A. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure.
- B. The instream flow requirements in Paragraphs 5.E. 5.I. of this amendment apply to both diversion and impoundment of water under the permit, as amended, and replace the requirements in Paragraph 4.d. of the original permit.
- C. For purposes of applying the environmental flow requirements in Paragraphs 5.E. 5.I. of this amendment, Permittee's measurement point shall be the dam at Lake Naconiche.
- D. Notwithstanding the requirements set out in Paragraphs 5.E. 5.I. of this amendment, if Permittee has stored water in accordance with the terms and conditions of the permit, as amended, at the time the water was stored, Permittee may divert and use that stored water, even if any environmental flow requirements are not met at the time of the subsequent diversion and use of that stored water. Permittee is not required to release previously stored water to meet the environmental flow requirements in this amendment.
- E. Permittee may only divert or impound water when streamflow exceeds the following environmental flow values at Permittee's measurement point, subject to the requirements of Paragraphs 5.F. 5.I. below.

Season	Subsistence	Base
Winter	1.2 cfs	6.1 cfs
Spring	0.4 cfs	2.0 cfs
Summer	0.2 cfs	0.9 cfs
Fall	0.4 cfs	1.1 cfs

cfs = cubic feet per second

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

Subsistence Flow Special Conditions

- G. Permittee shall not divert or impound water if streamflow at Permittee's measurement point is below the applicable subsistence flow value for a season.
- H. If streamflow at Permittee's measurement point is above the applicable subsistence flow value for a season but below the applicable base flow value for a season, Permittee may divert or impound water unless streamflow at Permittee's measurement point falls below the applicable subsistence flow value.

Base Flow Special Conditions

- I. If streamflow at Permittee's measurement point is above the applicable base flow value for a season, Permittee may divert or impound water so long as the streamflow at Permittee's measurement point does not fall below the applicable base flow standard.
- J. Consistent with and subject to the conditions stated in Texas Water Code §11.147(e1), the commission may adjust the environmental flow conditions in this permit to provide for the protection of instream flows or freshwater inflows to the bay and estuary, 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).
- K. 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 Paragraph 2 DIVERSION
- L. Permittee shall demonstrate compliance with the terms and conditions of this amendment by maintaining records of the daily volume of water stored in and diverted from Lake Naconiche, and the daily streamflow releases from the dam at Lake Naconiche.
- M. Permittee shall allow representatives of the Texas Commission on Environmental Quality reasonable access to the property to inspect the measuring device and records.

This amendment is issued subject to all terms, conditions, and provisions contained in Water Use Permit No. 5585, except as specifically amended herein.

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

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

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

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

	For the Commission	
Date Issued:		

ŞTEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF AN APPLICATION TO AMEND A WATER USE PERMIT

APPLICATION NO. 5585A

Nacogdoches County has applied to amend Water Use Permit No. 5585 to authorize diversion and use of up to 4,750 acre-feet of water from the perimeter of Lake Naconiche, Neches River Basin for municipal, industrial, and agricultural purposes in Nacogdoches County and to modify Paragraph 4.d. of the Permit to conform with the adopted environmental flow standards in Title 30 Texas Administrative Code Chapter 298. More information on the application and how to participate in the permitting process is given below.

APPLICATION. Nacogdoches County, 101 West Main Street, Nacogdoches, TX 75961, Applicant, has applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment to a Water Use Permit pursuant to Texas Water Code (TWC) §11.122 and TCEQ Rule Title 30 Texas Administrative Code (TAC) §§ 295.1, *et seq.* Notice is being published and mailed to the water right holders of record in the Neches River Basin pursuant to Title 30 TAC §295.158(b)(2).

Water Use Permit No.5585 (Permit) authorizes Nacogdoches County (Applicant) to construct and maintain a dam and reservoir (Lake Naconiche) on Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, Neches River Basin and to impound 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County, with no right of diversion.

The Permit also contains Paragraph 4.d. which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs."

Applicant seeks to amend the Permit to authorize diversion and use of not to exceed 4,750 acre-feet of water per year from Naconiche Creek and the diversion point is identified as a point anywhere along the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

The diversion point is identified by a point on the centerline of the dam and is located at Latitude 31.766972° N, Longitude 94.573865° W in Nacogdoches County, ZIP Code 75946.

Applicant also seeks to amend the Permit by modifying Paragraph 4.d. of the original permit to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 TAC Chapter 298.

The application and fees were received on January 20, 2016. Additional fees and information

were received on November 15, 2016. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on April 25, 2017. Additional information was received on April 5 and July 19, 2019.

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

PUBLIC COMMENT / PUBLIC MEETING. Written public comments and requests for a public meeting should be submitted to the Office of the Chief Clerk, at the address provided in the information section below, 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 or electronically at https://www14.tceq.texas.gov/epic/eComment/ by entering WRPERM 5585 in the search field. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address.

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

Issued:

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Lillian Beerman, Project Manager Date: November 16, 2021

Water Rights Permitting Team

Through: Leslie Patterson, Team Leader

Resource Protection Team

From: George Gable, Aquatic Scientist

CMSTV Resource Protection Team

Subject: Nacogdoches County

WRPERM 5585 CN601098536

Naconiche Creek, Neches River Basin

Nacogdoches County

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

APPLICATION SUMMARY

Water Use Permit No. 5585 (Permit) authorizes Nacogdoches County (Applicant) to maintain a reservoir (Lake Naconiche) on Naconiche Creek, Neches River Basin, impounding 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County.

The Permit also contains Paragraph 4.D which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs".

The Applicant requests to amend the Permit by modifying Paragraph 4.D to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 Texas Administrative Code (TAC) Chapter 298.

The Applicant also requests to amend the Permit to divert 4,750 acre-feet of water per year from the perimeter of Lake Naconiche, at a maximum diversion rate of

Nacogdoches County, 5585A Naconiche Creek, Neches River Basin Page **2** of **5**

26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

ENVIRONMENTAL ANALYSIS

Aquatic and Riparian Habitats: The Applicants reservoir is located on Naconiche Creek, a perennial waterbody, in the Tertiary Uplands of the South-Central Plains Ecoregion (Griffith *et al.* 2007).

The checklist for the Neches River Basin identified a total of 79 species of ichthyofauna occurring within Nacogdoches County (Hendrickson and Cohen 2015). The interior least tern (*Sternula antillarum athalassos*), gulf coast waterdog (*Necturus beyeri*), blackbelted crayfish (*Procambarus nigrocinctus*), Neches crayfish (*Procambarus nechesae*), blackspot shiner (*Notropis atrocaudalis*), Sabine shiner (*Notropis sabinae*), western creek chubsucker (*Erimyzon claviformis*), Louisiana pigtoe (*Pleurobema riddellii*), sandbank pocketbook (*Lampsilis satura*), southern hickorynut (*Obovaria arkansasensis*), Texas heelsplitter (*Potamilus amphichaenus*), Texas pigtoe (*Fusconaia askewi*), and alligator snapping turtle (*Macrochelys temminckii*), high interest aquatic species, are known to occur in Nacogdoches County (TPWD 2015).

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

On April 20, 2011, the TCEQ adopted environmental flow standards for the Sabine and Neches Rivers, and Sabine Lake Bay (Title 30 Texas Administrative Code (TAC) Chapter 298 Subchapter C). These environmental flow standards are considered adequate to support a sound ecological environment (Title 30 TAC §298.260).

The Applicant is requesting a new appropriation of water and therefore is subject to the adopted standards. This review is conducted in accordance with §11.147(e-3) of the TWC and Title 30 TAC 298 Subchapter C (Sabine and Neches Rivers, and Sabine Lake Bay). The Permit also contains a flow through requirement in Paragraph 4.D, and the Applicant has requested that Paragraph 4.D be modified to conform to the adopted environmental flow standards. Staff reviewed the information submitted by the Applicant and agree that replacing the existing streamflow restriction with the subsistence and base flow standards would protect the adopted standards and the environment.

In Title 30 TAC §298.280, environmental flow standards were established at United States Geological Survey (USGS) Gage No. 08036500 – Angelina River near Alto, Texas and the applicable standards are shown in Table 1.

Table 1. Environmental flow standards (cfs) at Gage No. 08036500 -

Angelina River near Alto, TX.

Season	Subsistence	Base
Winter	55 cfs	277 cfs
Spring	18 cfs	90 cfs
Summer	11 cfs	40 cfs
Fall	16 cfs	52 cfs

cfs = cubic feet per second

Applicant has requested that compliance with the adopted environmental flow standards be measured at USGS Gage No. 08036500 – Angelina River near Alto, Texas. Applicant further requested that compliance with the adopted environmental flow standards for subsistence and base flows utilize a drainage area ratio to determine the flows that must pass the Applicant's impoundment. Applicant translated the adopted subsistence and base flow standards using a drainage area ratio from the drainage area of USGS Gage No. 08036500 - Angelina River near Alto, Texas to the drainage area of the Applicant's impoundment. Resource Protection staff reviewed the information submitted by the Applicant and the translated values and agrees that using the translated values for subsistence and base flows and applying those values at the Applicant's impoundment would protect the adopted standards. Resource Protection staff's recommendations are shown in Table 2.

Table 2. Environmental flow values (cfs) at the Applicant's impoundment.

Season	Subsistence	Base
Winter	1.2 cfs	6.1 cfs
Spring	0.4 cfs	2.0 cfs
Summer	0.2 cfs	0.9 cfs
Fall	0.4 cfs	1.1 cfs

Subsistence and base flow standards vary depending on the seasons. Seasons are defined in Title 30 TAC §298.255, as follows: Winter (January through March), Spring (April through June), Summer (July through September), and Fall (October through December).

No special conditions for high flow pulses are required because the request for authorization to divert a maximum of 4,750 acre-feet of water is less than 10,000 acre-feet per year, as described in Title 30 TAC §298.285(b).

Resource Protection staff recommend that diversion and impoundment of water under this proposed amendment should be limited to comply with the applicable environmental subsistence and base flow values.

Recreational Uses: Lake Naconiche and Naconiche Creek have a presumed primary contact recreation 1 use (TCEQ 2018). The Applicant's request should not adversely impact recreational uses.

Water Quality: Lake Naconiche and Naconiche Creek have a presumed high aquatic life use (TCEQ 2018). The Applicant's request should not adversely impact water quality.

Freshwater Inflows: Freshwater inflows are critical for maintaining the historical productivity of bays and estuaries along the Gulf Coast. The proposed project is located more than 200 river miles from the Gulf of Mexico. The request to modify Paragraph 4.D is not a new appropriation of water. Therefore, the Applicant's request should not have any impact to Sabine Lake Bay.

RECOMMENDATIONS

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

- 1. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure.
- 2. Permittee may only divert or impound water when streamflow exceeds the following environmental flow values at the Permittee's measurement point, subject to the requirements of Special Conditions 3-6 below.

Season	Subsistence	Base
Winter	1.2 cfs	6.1 cfs
Spring	0.4 cfs	2.0 cfs
Summer	0.2 cfs	0.9 cfs
Fall	0.4 cfs	1.1 cfs

cfs = cubic feet per second

3. Seasons are defined as follows: Winter (January through March), Spring (April through June), Summer (July through September), and Fall (October through December).

Subsistence Flow Special Conditions

- 4. Permittee shall not divert or impound water if streamflow at the Permittee's measurement point is below the applicable subsistence flow value for a season.
- 5. If streamflow at the Permittee's measurement point is above the applicable subsistence flow value for a season but below the applicable base flow

Nacogdoches County, 5585A Naconiche Creek, Neches River Basin Page **5** of **5**

value for a season, Permittee may divert or impound water unless streamflow at the Permittee's measurement point falls below the applicable subsistence flow value.

Base Flow Special Conditions

6. If streamflow at the Permittee's measurement point is above the applicable base flow value for a season, Permittee may divert or impound water so long as the streamflow at the Permittee's measurement point does not fall below the applicable base flow standard.

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Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Lillian Beerman, Project Manager Date: November 16, 2021

Water Rights Permitting Team

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

Water Availability Division

Cheryl Covone, Team Leader
Surface Water Availability Team

From: Steven Mahr, Hydrologist

Surface Water Availability Team

Subject: Nacogdoches County

WRPERM 5585 CN601098536

Naconiche Creek, Neches River Basin

Nacogdoches County

Water Availability Analysis

Application Summary

Water Use Permit No. 5585 (Permit) authorizes Nacogdoches County (Applicant) to maintain a reservoir (Lake Naconiche) on Naconiche Creek, Neches River Basin, impounding 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County.

The Permit also contains Paragraph 4.D which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs".

The Applicant requests to amend the Permit to divert 4,750 acre-feet of water per year from the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

The Applicant also requests to amend the Permit by modifying Paragraph 4.D to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 Texas Administrative Code (TAC) Chapter 298.

The application was declared administratively complete on April 25, 2017.

Water Availability Analysis

Resource Protection recommended that the application be subject to instream flow requirements. See the Resource Protection Memo dated July 14, 2021.

The Water Rights Analysis Package (WRAP) simulates management of the water resources of a river basin. 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.

An evaluation of a proposed appropriation of state water must consider effects of the proposed amendment on groundwater or groundwater recharge. The naturalized flows that are the basis for the TCEQ WAM take into account both contribution to river flow caused by groundwater coming to the surface in the river (springs) and decreases in river flow caused by the river flowing over recharge features and losing surface water to groundwater recharge. Therefore, any effects on groundwater or groundwater recharge are incorporated into the modeling for this application. By considering any gains and losses due to groundwater/surface water interaction in its water availability analysis, the commission is protecting groundwater resources.

Staff used the Full Authorization simulation of the Neches River WAM, where all water rights use their maximum authorized amount and return flows are not included, to evaluate impacts on other water rights as a result of this application. Staff began by incorporating updates to the WAM that extend the end date of the naturalized flow data set from 1998 to 2018. These updates included extensive revisions to improve evaporation data sets and calculations throughout the period of record.

The Applicant submitted suggested modifications to TCEQ's existing Neches River WAM relating to the subordination of the Lower Neches Valley Authority's November 12, 1963 water rights in Sam Rayburn Reservoir and B. A. Steinhagen Lake, as set out in Certificate of Adjudication No. 4411. Staff reviewed the suggested modifications and concluded that, although the subordination in the existing TCEQ WAM is adequate to determine water availability, the suggested changes, with some adjustments, would better represent the water rights affected by the subordination and water availability in the basin. Therefore, Staff updated the subordination in the TCEQ WAM to incorporate an adjusted version of the Applicant's proposed changes.

Staff used the Neches River WAM, modified as described above, to evaluate impacts on other water rights as a result of the request to replace the existing instream flow requirement at Lake Naconiche with the adopted environmental flow standards. The period of record for the Neches River WAM is 1940 to 2018.

Staff first modeled the application with the existing instream flow requirement. Staff then revised the instream flow requirement to include the adopted environmental flow standards, as translated from the measurement point at the Angelina River near Alto to Lake Naconiche. Staff applied the translated subsistence and baseflow standards to the existing impoundment authorization at its April 30, 1997 priority date. Staff compared the pre- and

Nacogdoches County, WRPERM 5585A Naconiche Creek, Neches River Basin Page 3 of 3

post-application volume reliabilities for all basin water rights and found a negative impact of 0.05% to one water right. Because the indicated impact is very small, staff is of the opinion that amending the instream flow requirement for the existing impoundment does not constitute a practical impact to other water rights in the basin.

Staff then evaluated the request for a new appropriation of 4,750 acre-feet per year from Lake Naconiche. Simulation results indicate that 100% of the requested demand would be met 100% of the time on a monthly and annual basis.

On April 20, 2011, the TCEQ adopted environmental flow standards for the Sabine and Neches River Basins and Sabine Lake Bay (Chapter 298-Environmental Flow Standards for Surface Water, Subchapter C). The adopted rules do not include freshwater inflow standards for Sabine Lake Bay. The Sabine and Neches Rivers and Sabine Lake Bay Basin and Bay Expert Science Team (BBEST) indicated that the average annual inflow to Sabine Lake Bay is 14,000,000 acre-feet per year. The BBEST also indicated that 13.6% of this volume originates from the streamflows above the Neches River at Sam Rayburn Reservoir. Staff found that the diversion amount of 4,750 acre-feet of water is less than 0.3% of the total freshwater inflow. Therefore, Staff is of the opinion that the diversion should not result in a significant reduction of freshwater inflows to Sabine Lake Bay.

Conclusion

Hydrology staff can support granting the application provided the amendment includes the following special conditions.

- 1. If Permittee has stored water in accordance with the terms and conditions of this amendment, including any applicable environmental flow requirements in effect at the time the water was stored, Permittee may divert and use that stored water, even if the applicable environmental flow requirement is not met at the time of the subsequent diversion and use of that stored water.
- 2. Permittee is not required to release previously stored water to meet the environmental flow requirements in this amendment.

Steven Wahr
Steven Mahr, Hydrologist

¹ Sabine and Neches Rivers and Sabine Lake Bay Expert Science Team (November 2009). Environmental Flows Recommendations Report. Table 17. *Summary Information for Major Texas Estuaries*. P. 143.

² Sabine and Neches Rivers and Sabine Lake Bay Expert Science Team (November 2009). Environmental Flows Recommendations Report. Figure 35. *Percent Inflow Contributions to Sabine Lake.* P. 146.

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Lillian Beerman, Project Manager Date: July 14, 2021

Water Rights Permitting Team

Through: Jason Godeaux, Team Leader

Resource Protection Team

Jennifer Allis, Senior Water Conservation Specialist

Resource Protection Team

From: Trent Jennings, Water Conservation Specialist

Resource Protection Team

Subject: Nacogdoches County

WRPERM 5585 CN601098536

Naconiche Creek, Neches River Basin

Nacogdoches County

APPLICATION SUMMARY

Water Use Permit No. 5585 (Permit) authorizes Nacogdoches County (Applicant) to maintain a reservoir (Lake Naconiche) on Naconiche Creek, Neches River Basin, impounding 9,072 acre-feet of water for flood control and in-place recreational purposes in Nacogdoches County.

The Permit also contains Paragraph 4.D which states "To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir: December 5 cfs, January 8 cfs, February 12 cfs, March 15 cfs, April 11 cfs, May 9 cfs, and June 4 cfs".

The Applicant requests to amend the Permit to divert 4,750 acre-feet of water per year from the perimeter of Lake Naconiche, at a maximum diversion rate of 26.2 cfs (11,771 gpm), for municipal, industrial, and agricultural purposes in Nacogdoches County.

The Applicant also requests to amend the Permit by modifying Paragraph 4.D to conform to the adopted environmental flow standards in TCEQ's administrative rules Title 30 Texas Administrative Code (TAC) Chapter 298.

WATER CONSERVATION REVIEW

Pursuant to Title 30 Texas Administrative Code (TAC) §295.9, an application requesting a new appropriation of water requires the submittal of water conservation and drought contingency plans.

Resource Protection staff reviewed the water conservation and drought contingency plans and found the plans to be administratively complete per 30 TAC Chapter 288 for wholesale water suppliers.

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), $\S11.134(b)(3)(A)$. Also, the applicant must provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation pursuant to TWC $\S11.134(b)(4)$. To provide that evidence, the applicant must submit a water conservation plan in accordance with 30 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 $\S11.134$, 30 TAC $\S297.50$ and $\S288.7$.

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 Resource Protection 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.

Water Conservation Goals and Strategies

The Applicant submitted water conservation and drought contingency plans for municipal use, which were reviewed by Resource Protection staff and found to be administratively complete per 30 TAC Chapter 288.

The Applicant's 2019 Water Conservation Plan establishes goals for total per capita usage. Per capita water use of 114.5 gallons per capita per day (gpcd) for the year 2024 and 112.8 gpcd for 2029.

The water conservation plan discusses several programs that the Applicant has established to help achieve the stated goals:

- Regular calibration of meters at each raw water delivery point to ensure accuracy.
- Program for leak detection and repair.
- Regular water audits to monitor the amount of metered diversions against metered sales to identify non-revenue losses.
- Water conservation public awareness and education program.
- Conservation-oriented water rates and rate structures for wholesale customers.

As such, Resource Protection staff has deemed these measures and goals to be reasonable.

Requirements for Water Right Application under 30 TAC §288.7

Under 30 TAC §288.7, a water conservation plan submitted with a water right application for a new or additional appropriation of water must include data and information which:

- (1) supports the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- (2) evaluates conservation as an alternative to the proposed appropriation; and
- (3) evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Consideration of Water Conservation Goals

The Applicant's 2019 Water Conservation Plan goals for total per capita use are in line with the 2021 Region I Plan. The request for authorization to divert 4,750 acrefeet of water per year for municipal, industrial, and agricultural uses can help to meet the projected needs of the Applicant and Region I, as well as reduce demands on other water supplies.

Conservation as an Alternative to the Proposed Appropriation

As part of the regional planning process, the planning groups are required to perform a comprehensive analysis of potentially feasible water management strategies, including water conservation. According to the 2021 Region I Plan, the conservation goals and strategies for the Applicant will likely increase existing water supplies by 966 acre-feet in 2070.

Feasible Alternatives to New Water Development

The proposed amount of appropriation outlined in the application is consistent with the 2021 Region I Plan, which has not identified another feasible alternative to the proposed appropriation and has concluded that the requested amount of appropriation is necessary and reasonable for the proposed uses. Nacogdoches County, 5585A Naconiche Creek, Neches River Basin Page 4 of 4

Water Need

The 2021 Region I Plan population for the Applicant is projected to increase from 72,136 in 2020 to 119,364 in 2070, and projected municipal water demand to increase from 11,586 acre-feet in 2020 to 18,102 acre-feet of water.

Consistency with State and Regional Water Plans

The 2021 Region I Water Plan specifically includes the Applicant's proposed project as a water management strategy. As such, the application is consistent with the 2021 Region I Water Plan and the 2022 State Water Plan.

RECOMMENDATIONS

Based on the analysis, Resource Protection staff has evaluated the application and determined that it meets the review requirements.

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

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

Lillian Beerman

Date:

September 12, 2018

Water Rights Permitting Team

Thru:

From:

Warren D. Samuelson, P. E., Manager

Dam Safety Section MC-177

Subject:

Nacogdoches County, Application to Amend Permit No. 5585, Naconiche

Creek, Nueces River Basin, Nacogdoches County.

The applicant seeks to add different uses and a diversion point for the use. Lake Naconiche Dam (Attoyac Bayou Watershed Site 23A Dam) has a capacity of 9,072 acrefeet.

The dam was found to be in good condition during the last TCEQ dam safety inspection.

There are no dam safety requirements for this application.

Warren D. Samuelson, P. E., Manager

Dam Safety Section



816 Congress Avenue, Suite 1900 Austin, Texas 78701

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www.lglawfirm.com

Ms. Thornton's Direct Line: (512) 322-5876

July 19, 2019

Dr. Lillian E. Beerman Water Rights Permitting Team (MC 160) Water Rights Permitting and Availability Section Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 VIA FIRST-CLASS MAIL
AND ELECTRONIC TRANSMISSION

Re:

Nacogdoches County

WRPERM 5585; CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County (2733-2)

Dear Dr. Beerman:

Pursuant to your recommendation during our April 5, 2019 call in regard to the above-referenced application, please find enclosed a Water Conservation, Drought Contingency and Water Emergency Plan (the "Plan") that is submitted to the Texas Commission on Environmental Quality on behalf of Nacogdoches County (the "County").

The Plan was adopted and approved by the Nacogdoches County Commissioner's Court on July 17, 2019. A copy of the resolution memorializing that approval is included as Appendix E to the Plan.

Please don't hesitate to contact me if you have any questions or need additional information. On behalf of the County, we appreciate your efforts in reviewing and processing this application.

Sincerely,

Sara R. Thornton

SRT/plh 7882242 ENCLOSURES

Dr. Lillian Beerman July 19, 2019 Page 2

cc:

The Honorable Greg Sowell Mr. Keith Bradford

Ms. Simone Kiel

Water Conservation, Drought Contingency and Water Emergency Response Plan

Prepared for:

Nacogdoches County



Prepared by:



July 2019

Water Conservation and Drought Contingency Plan for the Lake Naconiche Regional Water Supply System in Nacogdoches County

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- TCEQ Requirements and Location in This Plan

APPENDIX C Letter to Region I Water Planning Group APPENDIX D Water Utility Profile

APPENDIX E County Commissioner's Resolution

APPENDIX F Water Rights Certificate

Water Conservation, Drought Contingency and Water Emergency Response Plan for the Lake Naconiche Regional Water Supply System in Nacogdoches County

1. TCEQ RULES

This Water Conservation, Drought Contingency and Water Emergency Response Plan (Plan) includes the elements necessary for Nacogdoches County (referred to as the County) to comply with the Texas Commission on Environmental Quality (TCEQ) rules for water conservation and drought contingency planning for wholesale water providers.

1.1 Water Conservation Plans

The TCEQ rules governing development of water conservation plans for wholesale public water suppliers are contained in Title 30, Section 288.5 of the Texas Administrative Code (TAC), which is included in **Appendix B**. For the purpose of TAC Chapter 288, a water conservation plan is defined as a "strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water." Water conservation plans are to be submitted to the TCEQ every 5 years or within 90 days following the adoption of a revision. A copy of the plan must also be submitted to the Texas Water Development Board (TWDB). The elements in the TCEQ water conservation rules covered in this Conservation Plan are listed in **Appendix B**.

1.2 Drought Contingency Plans

The TCEQ rules governing development of drought contingency plans for wholesale public water suppliers are contained in Title 30, Section 288.22 of the TAC, which is included in **Appendix B**. For the purpose of TAC Chapter 288, a drought contingency plan is defined as a "strategy or combination of strategies for temporary supply management and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies." Drought contingency plans are to be submitted to the TCEQ every 5 years or within 90 days following the adoption of a revision. A copy of the plan must also be submitted to the TWDB. The elements in the TCEQ drought contingency rules covered in this Plan are listed in **Appendix B**.

1.3 Implementation Report

The TCEQ rules governing the required submittals for water conservation plans and drought contingency plans for wholesale public water suppliers are contained in Title 30, Section 288.30 of the TAC, which is included in **Appendix B**. The rules state that an implementation report must be submitted to TCEQ along with the updated water conservation and drought contingency plan. The implementation report includes:

- 288.30(2)(A) the list of dates and descriptions of the conservation measures implemented;
- 288.30(2)(B) data about whether or not targets in the plans are being met;
- 288.30(2)(C) the actual amount of water saved; and
- 288.30(2)(D) if the targets are not being met, an explanation as to why any of the targets are not being met, including any progress on that particular target.

An implementation report is not applicable at this time because no water has been sold or delivered. In addition, the TWDB requires the County to submit a Water Conservation Program Annual Report. The County will annually prepare and submit this report as required, with the first annual report to be submitted after the County delivers water for the previous 12 months.

1.4 Review and Update of the Plan

The TCEQ requires updating of water conservation, drought contingency, and water emergency response plans every five (5) years (Title 30, Sections 288.5(3) and 288.22(10(c) of the TAC). The County will review and update the Plan at least every five (5) years.

1.5 Coordination with Regional Water Planning Group

In accordance with TCEQ regulations (Title 30, Section 288.5(1)(I) of the TAC), a copy of this adopted Water Conservation and Drought Contingency Plan will be provided to the Region I Water Planning Group. A copy of the cover letter to accompany this Plan is in **Appendix C**.

2. WATER CONSERVATION PLAN

2.1 Objectives

The objectives of this Water Conservation Plan ("WCP") are as follows:

- To reduce water consumption from the levels that would prevail without conservation efforts;
- To reduce the loss and waste of water; and
- To improve efficiency in the use of water.

2.2 Wholesaler Water Utility Profile Form

Lake Naconiche is located in northeast Nacogdoches County on Naconiche Creek. It is authorized under Permit/Application 5585 to impound 9,072 acre-feet at elevation 348 feet msl for flood control and recreational purposes. Lake Naconiche is impounded by the Attoyac Bayou WS NRCS Site 23A Dam, which is an earth fill dam with a length of 1,605 feet and maximum height of 59 feet. The elevation at the top of the dam is 365 feet with a total storage of 27,225 acre-feet. Construction of this dam was completed in 2006. **Table 2-1** shows the elevation, capacity, and area for Lake Naconiche. **Figure 2-1** contains a location map of Lake Naconiche. **Figure 2-2** contains a map of the potential service areas for the Lake Naconiche Regional Water Supply.

Lake Naconiche is currently being operated for flood control and recreational purposes. An amendment is proposed to authorize diversion of 4,750 acre-feet per year for multi-purposes of use from the perimeter of Lake Naconiche. The proposed amendment is a recommended project in the 2016 Region I Water Plan and 2017 State Water Plan. Based on the regional water plan, potential customers include Nacogdoches County-Other (Caro WSC, Lilbert-Looneyville, Libby, and others), Appleby WSC, Lily Grove WSC, and Swift WSC in Nacogdoches County as shown in Figure 2-2.

Appendix D of this Plan contains a completed TCEQ Water Utility Profile form.

Table 2-1: Elevation, Storage, and Area Relationships for Lake Naconiche

Elevation (feet-msl)	Capacity (acre-feet)	Area (acre)
312	0	0
316	24	12
320	118	35
324	346	79
324.2	361	83
328	812	154
332	1,644	262
338	2,884	358
340	4,510	455
344	6,554	567
348	9,072	692
352	12,100	856
**355	15,031	1,003
356	15,966	1,055
360	20,544	1,236
364	25,842	1,453
***365	27,225	1,512

*Normal pool elevation/

^{**}Emergency spillway elevation

^{***}Top of dam elevation

Figure 2-1: Location Map of Lake Naconiche

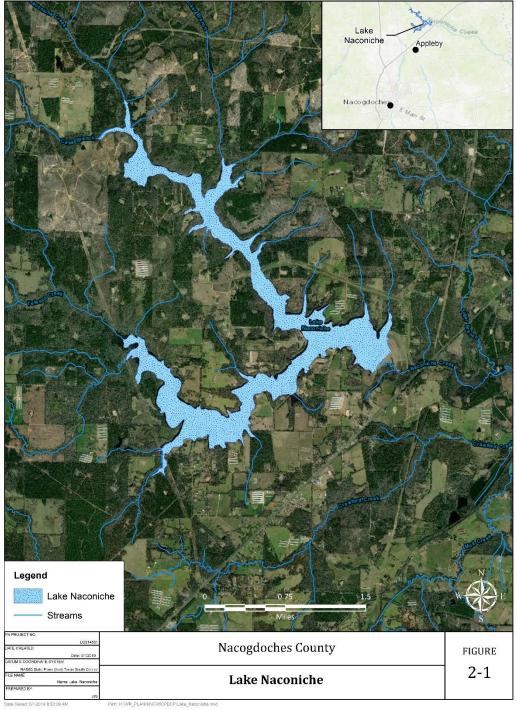
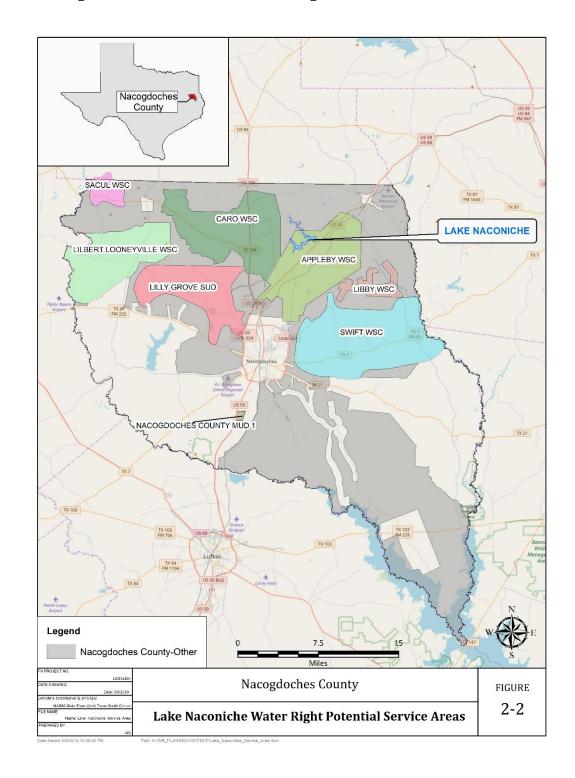


Figure 2-2: Lake Naconiche Water Right Potential Service Areas



2.3 Specification of Water Conservation Goals

The goals for this WCP include the following:

- Strive to attain the five-year and ten-year targets for water savings.
- Conduct water audits as required by the TCEQ and maintain water loss to twelve (12)
 percent of the total water used through existing and new maintenance programs.
- Raise public awareness of water conservation and encourage responsible public behavior by a public education and information program.

2.3.1 Projected Water Use

According to the 2021 Region I Water Plan projections, municipal per capita water use for the Lake Naconiche service areas are projected to range between 115.8 gallons per capita per day (GPCD) in 2020 and 112.4 GPCD in 2030. Overall, the municipal per capita water usage is projected to decline to 109.3 GPCD by the year 2070. Municipal per capita water use is the product of population and water diversions, both of which are documented in the Nacogdoches County's Utility Profile in **Appendix E** and are illustrated graphically below.

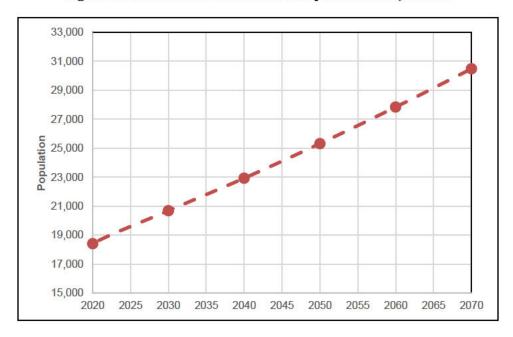


Figure 2-3: Service Area Customer Population Projections

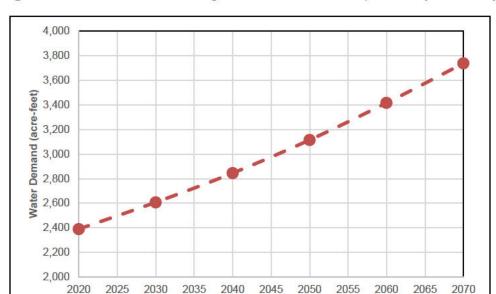
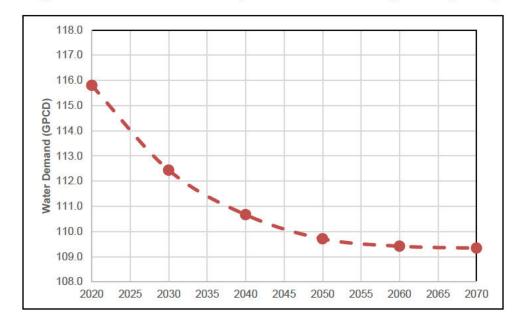


Figure 2-4: Service Area Municipal Water Demand Projections (Acre-Feet)

Figure 2-5: Service Area Municipal Water Demand Projections (GPCD)



2.3.2 Five- and Ten-Year Targets

The County's five- and ten-year municipal per capita water use targets are shown below:

- Five-year target (year 2024) 114.5 GPCD
- Ten-year target (year 2029) 112.8 GPCD

These goals are developed by interpolating between the projected water demands in 2020 (115.8 GPCD) and 2030 (112.4 GPCD) for the Lake Naconiche service areas, as shown in **Figure 2-6**.

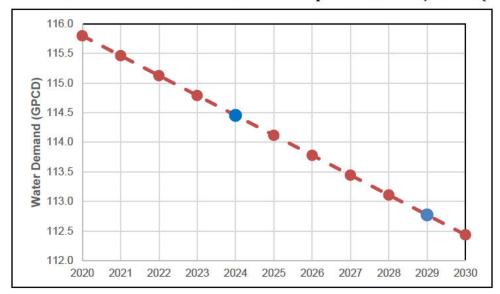


Figure 2-6: Five- and Ten-Year Service Area Municipal Demand Projections (GPCD)

2.4 Metering Devices

One of the key elements in water conservation is tracking water use to control losses through leaks or illegal diversions. Careful metering of water deliveries and water use, detection and repair of leaks in the distribution system, and regular monitoring of nonrevenue water are important in controlling losses.

The County will own and operate meters for the raw water intake and each raw water delivery point. The County will calibrate its meters annually and more frequently if meter data is in question. County meters will be maintained in accordance with manufacturers' recommendations.

The County will meter each of its wholesale customers. In many cases, the County's wholesale customers will in turn meter their customers. The County will encourage those County wholesale customers who do not meter all their customers to work towards having a meter for each customer.

2.5 Record Management Program

As required by Title 30, Section 288.5(1)(D) of the TAC, the record management program is required to determine water deliveries, sales, and losses. The County will maintain records of water deliveries, sales, and losses as determined through its metering system.

2.6 Metering and Leak Detection and Repair Program

The County will regularly monitor the amount of metered diversions against metered sales to identify non-revenue losses. If these losses reach a certain threshold, the County will perform inspections of the meters and transmission lines to identify potential leaks.

The County will conduct water audits as required by the TWDB with a nonrevenue water goal of twelve (12) percent of the total water diverted versus delivered to municipal wholesale customers. The County will promptly address and repair any issues identified during the audit.

As a wholesale provider of water, Nacogdoches County is not responsible for water loss within its potential municipal customers' distribution systems, although the County suggests its customers adopt a Water Audit and Leak Detection Program to reduce water loss and consumption.

2.7 Contract Requirements

Every water supply contract entered into or renewed after official adoption of this Plan, and including any contract extension, will include a requirement that each successive wholesale customer must develop and implement a water conservation and drought contingency plan or water conservation measures. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of Title 30, Chapter 288 of the TAC.

2.8 Reservoir Systems Operation Plan

Nacogdoches County owns and operates one reservoir; therefore, the requirement of a Reservoir Systems Operations Plan is inapplicable to the County, as there is no need for coordinated operation.

2.9 Other Conservation Measures

Conservation-oriented water rates and rate structures for wholesale customers will be implemented when the contracts to sell water authorized by this water right are executed. The County will encourage wholesale customers to adopt retail water rates and rate structures that are conservation-oriented.

Furthermore, the County will encourage customers to include water use education as part of their ongoing water conservation efforts.

2.10 Means for Implementation and Enforcement

As a wholesale provider of water, Nacogdoches County has no direct enforcement authority over those conservation practices ultimately implemented and enforced by its potential customers. However, the County will make best efforts to ensure implementation and enforcement of its WCP via outreach and contractual requirements. Furthermore, the County's annual water conservation report provides a means by which the County can measure its success and quantify water savings via conservation initiatives, thereby optimizing implementation of the WCP over time.

2.11 Water Conservation Plans Submitted with a Water Right Application for New or Additional State Water

As required by rule, this section addresses:

- 1. Applicant's proposed use of water with consideration of the water conservation goals of the WCP;
- 2. Evaluates conservation as an alternative to the proposed appropriation; and
- 3. Evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Applicant's proposed use of water. The applicant (Nacogdoches County) proposes to use the water as requested from Lake Naconiche (Application No. 5585A to amend Water Use Permit No. 5585) for multiple purposes within Nacogdoches County. This water would be used to meet water supply needs within the county, particularly for Nacogdoches County-Other users and several rural WSCs. Water needs were identified through the state water planning process, which considers reduced per capita water use that is consistent with the goals of this WCP.

Conservation as an alternative to the requested appropriation. As part of the regional planning process, the planning groups are required to perform a comprehensive analysis of potentially feasibly water management strategies, including water conservation, prior to other strategies. The proposed water right amendment is a recommended project in the 2016 Region I Water Plan and 2017 State Water Plan. The five-year and ten-year per capita goals outlined in this WCP are consistent with the 2016 Region I projections. In addition, this project promotes regionalization and optimization of existing surface water in Nacogdoches County that further promotes conservation of water supplies.

Other feasible alternatives. The proposed amount of appropriation outlined in the application is consistent with the 2016 Region I Plan, which has not identified another feasible alternative to the proposed appropriation and has concluded that the requested amount of appropriation is necessary and reasonable for the proposed use.

3. DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN

3.1 Policy, Purpose, and Intent

Nacogdoches County adopts the following Drought Contingency and Water Emergency Response Plan ("DCWERP") in order to:

- Conserve the available water supply;
- Enforce drought response measures included in Section 3.4 of this Plan;
- Protect the integrity of the water supply facilities, particularly with regard to domestic water use, sanitation, and fire protection;
- Protect and preserve public health, welfare, and safety; and
- Minimize the adverse impacts of a water supply shortage or other emergencies.

3.2 Public Involvement

Nacogdoches County will solicit public comment at public meetings in preparation for the development of this DCWERP. The County will give careful consideration of said input into the adoption and implementation of the DCWERP and any revisions thereto.

3.3 Threshold Drought Conditions

The County will consider four stages or conditions for determining the degree of urgency for initiation of this DCWERP.

Stage 1: Mild Drought Condition

The County may recognize and initiate actions for a mild water shortage condition when Lake Naconiche is below a storage of 65% of reservoir capacity (~5,900 acrefeet).

Stage 2: Moderate Drought Condition

The County may recognize and initiate actions for a moderate drought condition when Lake Naconiche is below a storage of 55% of reservoir capacity (~4,990 acrefeet).

Stage 3: Severe Drought Condition

The County may recognize and initiate actions for a severe drought condition when Lake Naconiche is below a storage of 45% of reservoir capacity (~4,080 acre-feet).

Stage 4: Exceptional Drought or Emergency Condition

The County may recognize and initiate actions for an emergency water supply condition when one or more of the following are true or at the discretion of the County Judge:

- Lake Naconiche is below a storage of 35% of reservoir capacity (~3,175 acre-feet);
- Mechanical or system failures occur that cause loss of capability to provide water service;
- iii. Natural or man-made contamination of the water supply source occurs.

3.4 Drought Contingency Measures

The County establishes the following drought contingency and water emergency response measures to implement during drought situations. The County will notify the Executive Director of the TCEQ within 5 business days of the implementation of any mandatory provisions of the DCWERP.

The trigger levels are summarized in the following table and described in greater detail below.

Drought Stage	Lake Naconiche Storage (acre-feet)	Lake Naconiche % Full	Target Reduction in Water Use (%)
None	9,072	100.0	None
Stage 1 (Mild)	5,900	65.0	5
Stage 2 (Moderate)	4,990	55.0	10
Stage 3 (Severe)	4,080	45.0	15
Stage 4 (Exceptional, Emergency)	3,175	35.0	20

Table 3-1: Drought Contingency Plan Trigger Levels

1. Stage 1: Mild Drought Condition

- a. The County will advise customers early of factual conditions and update customers about worsening situations. The County may advise the news media and its customers of the drought or emergency conditions on a weekly basis.
- b. The County will require its customers to initiate Stage 1 of their drought contingency plans or to adhere to the conditions of this DCWERP, if they do not have their own. Customers may use their own plans as long as they are at least as stringent as the County's DCWERP.
- c. The County may suggest that its customers increase public education efforts.

d. The County will suggest its customers employ voluntary conservation measures to reduce water use by five (5) percent.

Requirements for termination: Stage 1 of the DCWERP may be rescinded when the lake storage returns to 65% of reservoir capacity (~5,900 acre-feet) or greater and is not expected to return below such storage in the near term, or Stage 1 may be rescinded at the discretion of the County Judge. The County will notify its wholesale customers and the media of the termination of Stage 1.

2. Stage 2: Moderate Drought Condition

- a. The County may require its customers to further decrease their water usage pursuant to their drought contingency plan or to adhere to the conditions of this DCWERP, if they do not have their own. Customers may use their own plans as long as they are at least as stringent as the County's DCWERP.
- b. The County may suggest to its customers not already doing so that they restrict water use for outdoor sprinkling; watering lawns, shrubs, and driveways; and washing of automobiles to twice a week. The County may also suggest that its customers employ "time of day" restrictions.
- c. The County may suggest each customer request that its business and other nonresidential customers stop or decrease certain water use activities.
- d. The County may reduce water delivery in accordance with pro rata curtailment in the Texas Water Code, Section 11.039, and the reduction targets outlined in the Drought Contingency Plan Trigger Levels Table in Section 3.4.

Requirements for termination: Stage 2 of the DCWERP may be rescinded when the lake storage returns to 55% of reservoir capacity (~4,990 acre-feet) or greater and is not expected to return below such storage in the near term, or Stage 2 may be rescinded at the discretion of the County Judge. The County will notify its wholesale customers and the media of the termination of Stage 2 in the same manner as the notification of initiation of Stage 2 of the DCWERP.

3. Stage 3: Severe Drought Condition

a. The County may require its customers to severely decrease their water usage pursuant to their drought contingency plan or to adhere to the conditions of this DCWERP, if they do not have their own. Customers may use their own plans as long as they are at least as stringent as the County's DCWERP.

- b. The County may suggest to its customers not already doing so that they restrict water from outdoor sprinkling; watering lawns, shrubs, and driveways; and washing of automobiles to once a week. The County may also suggest that customers employ "time of day" restrictions.
- c. The County may suggest each customer request its businesses and other nonresidential customers stop or decrease certain water use activities.
- d. The County may reduce water delivery in accordance with pro rata curtailment in the Texas Water Code Section 11.039 and the reduction targets outlined in the Drought Contingency Plan Trigger Levels Table in Section 3.4.
- e. The County may utilize alternative water sources with the prior approval of the TCEQ Executive Director, as appropriate.

Requirements for termination: Stage 3 of the DCWERP may be rescinded when the lake storage returns to 45% of reservoir capacity (~4,080 acre-feet) or greater and is not expected to return below such storage in the near term, or Stage 3 may be rescinded at the discretion of the County Judge. The County will notify its wholesale customers and the media of the termination of Stage 3 in the same manner as the notification of initiation of Stage 3 of the DCWERP.

4. Stage 4: Exceptional or Emergency Drought Condition

- a. The County Judge will declare an emergency water shortage condition.
- b. The County will assess the severity of the problem and identify the actions needed and time required to solve the problem.
- c. The County may call an emergency meeting with its customers to discuss major operational changes and conservation strategies.
- d. The County will suggest to its customers not already doing so that they completely restrict water from outdoor sprinkling; watering lawns, shrubs, and driveways; and washing of automobiles.
- e. The County may utilize alternative water sources with the prior approval of the TCEQ Executive Director, as appropriate.
- f. The County may reduce water delivery in accordance with pro rata curtailment in the Texas Water Code Section 11.039 and the reduction targets outlined in the Drought Contingency Plan Trigger Levels Table in Section 3.4.

g. The County will undertake necessary actions to alleviate problems and will issue emergency notifications to all appropriate entities and agencies.

Requirements for termination: Stage 4 of the DCWERP may be rescinded when the lake storage returns to 35% of reservoir capacity (~3,175 acre-feet) or greater and is not expected to return below such storage in the near term, or Stage 4 may be rescinded at the discretion of the County Judge. The County will notify its wholesale customers and the media of the termination.

3.5 Initiation and Termination Notification

The Nacogdoches County Judge or the official designee may initiate or terminate a drought or emergency response stage. The following procedures will be followed by the County for the initiation or termination of drought stages.

- The County will inform its customers of initiation or termination of drought or water emergency situations. The County will notify the public of the initiation or termination of drought conditions through any of the following means: The County website (http://www.co.nacogdoches.tx.us/), radio announcements, newspaper articles, and/or posting Notice of (Initiation or Termination) of Drought Conditions.
 - If any mandatory provisions of the DCWERP are activated, the County will notify the Executive Director of the TCEQ within 5 business days.
- 2. In all drought situations, the County will make regular public announcement of the water situation and request employment of conservation practices to meet the demands of the situation. The County will monitor its total system and reserves on a regular basis and will monitor all customer activities, practices, and reserves on a regular basis by:
 - a. Regular meter readings to verify consumption.
 - b. Visually inspecting areas of customer compliance, especially large users and potentially wasteful practices.
 - c. Confer with customers to evaluate effectiveness of activities to improve water conservation and to decrease water consumption.
 - d. Keep inventory of water sales and water supply at the County.
 - e. Implement water management measures during each stage of the DCWERP, including, but not limited to, the pro rata curtailment of water deliveries as provided in Texas Water Code Section 11.039, and utilization of alternative water sources with the prior approval of the TCEQ Executive Director, as appropriate.
 - f. Include provisions in every new or renewed water supply contract, including contract extensions, that in case of a shortage of water resulting from drought

or water emergency, the water will be distributed in accordance with Texas Water Code Section 11.039.

3. The County Judge shall be empowered, at his discretion, at the appropriate time, to cause a proportional reduction of water available to each customer in accordance with pro rata curtailment of water use provided in Texas Water Code Section 11.039 and based on any other conditions, physical, mechanical, or otherwise. The customer may appeal to the County the customer allocation during periods of forced conservation measures by the County. The customer may appeal the decision of the County Commissioner's Court to the TCEQ.

The County Judge or his/her official designee may decide not to order the implementation of a drought contingency and water emergency response stage even though one or more of the trigger criteria for the stage are met. Factors that could influence such a decision include, but are not limited to, the total demand on the supply, the time of the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs.

Likewise, the County Judge or his/her official designee may decide not to order the termination of a drought contingency and water emergency response stage even though the conditions for termination of the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought contingency and water emergency response stage.

3.6 Targets for Water Use Reductions

During periods of water shortage and drought, the targets for water savings for each stage of the DCWERP are as follows:

- Stage 1 (Mild Drought) 5 percent customer water use reduction
- Stage 2 (Moderate Drought) 10 percent customer water use reduction
- Stage 3 (Severe Drought) 15 percent customer water use reduction
- Stage 4 (Exceptional Drought or Emergency) 20 percent customer water use reduction

3.7 Procedures for Granting Variances to the DCWERP

The County Judge may grant temporary variances for existing water uses otherwise prohibited under this DCWERP to a customer if one or more of the following conditions are met:

- Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or for the person or entity requesting the variance.
- Compliance with this DCWERP cannot be accomplished due to technical or other limitations.

 Alternative methods that achieve the same level of reduction in water use can be implemented.

Variances shall be granted or denied at the discretion of the County Judge. All petitions for variances should be in writing and should include the following information:

- Name and address of the petitioner(s)
- Purpose of water use
- Specific provisions from which relief is requested
- Detailed statement of the adverse effect of the provision from which relief is requested
- Description of the relief requested
- · Period of time for which the variance is sought
- Alternative measures that will be taken to reduce water use
- Other pertinent information

3.8 Procedures for Enforcement

The County reserves the right to enforce any mandatory water use restrictions through any and all lawful means, including, but not limited to, penalties, fines, injunctive relief, and/or termination of service to its customers.

3.9 Modeled Impact of Drought Contingency Plan on Lake Naconiche

While the yield of Lake Naconiche is considered firm, Freese and Nichols, Inc. (FNI) quantified the impact the DCWERP might have on Lake Naconiche. FNI ran a surface water model with and without the water use reduction targets at triggers identified in this DCWERP and found the parameters to be appropriate.

The model results are summarized in Table 3-2, and Figure 3-1 and Figure 3-2:

Table 3-2: Lake Naconiche Levels and Storage with 2019 DCWERP

	With 2019 DCP Triggers & Goals
Stage 1 Trigger, Action	< 65% & ≥ 55% Capacity, 5% reduction
Stage 2 Trigger, Action	< 55% & ≥ 45% Capacity, 10% reduction
Stage 3 Trigger, Action	< 45% & ≥ 35% Capacity, 15% reduction
Stage 4 Trigger, Action	< 35% Capacity, 20% reduction
Minimum Storage (1940–1996)	1,414 acre-feet

AF = acre-feet

Figure 3-1: Lake Naconiche Storage without 2019 DCWERP Drought Triggers

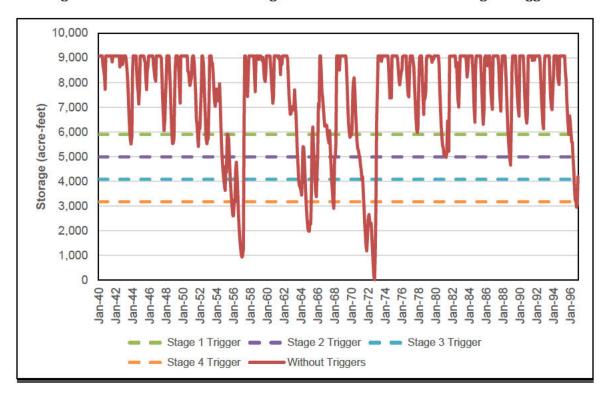
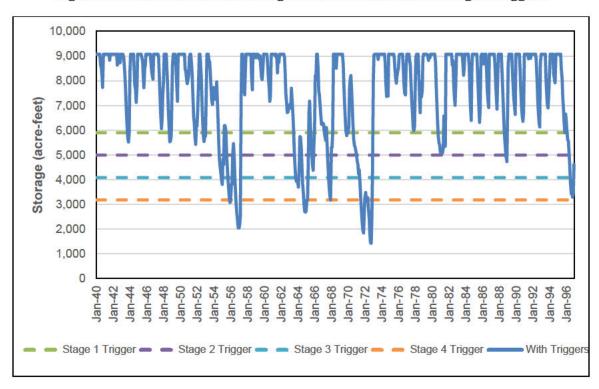


Figure 3-2: Lake Naconiche Storage with 2019 DCWERP Drought Triggers



APPENDIX A List of References

APPENDIX A List of References

- Freese and Nichols, Inc. (FNI). 2015. Supplement to Application for Water Right Amendment for Diversion from Lake Naconiche, prepared for the Nacogdoches County, Adopted October 2015.
- Texas Commission on Environmental Quality (TCEQ). 2018. Wholesale Water Utility Profile, downloaded from http://www.tceq.state.tx.us/assets/public/permitting/forms/20162.pdf, April 2019.
- Texas Commission on Environmental Quality (TCEQ). 2018. Water Conservation Implementation Report form, downloaded from http://www.tceq.state.tx.us/assets/public/permitting/watersupply/water-rights/20 159.doc, April 2019.
- Texas Administrative Code (TAC). 2018. Title 30, Part 1, Chapter 288, Subchapter A, Subchapter B, and Subchapter C, downloaded from http://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac view=4&ti=30&pt=1&ch=288, April 2019.
- Texas Water Development Board (TWDB). 2019. 2021 Regional and 2022 State Water Plan Projections Data, downloaded from http://www.twdb.texas.gov/waterplanning/data/projections/index.asp, April 2019.

APPENDIX B

Texas Commission on Environmental Quality Rules on Wholesaler Water Conservation and Drought Contingency Plans

APPENDIX B

Texas Commission on Environmental Quality Rules on Wholesaler Water Conservation and Drought Contingency Plans

Texas Administrative Code

TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT

CONTINGENCY PLANS, GUIDELINES AND

REQUIREMENTS

SUBCHAPTER A WATER CONSERVATION PLANS

RULE §288.5 Water Conservation Plans for Wholesale Water Suppliers

A water conservation plan for a wholesale water supplier must provide information in response to each of the following paragraphs. If the plan does not provide information for each requirement, the wholesale water supplier shall include in the plan an explanation of why the requirement is not applicable.

- (1) Minimum requirements. All water conservation plans for wholesale water suppliers must include the following elements:
- (A) a description of the wholesaler's service area, including population and customer data, water use data, water supply system data, and wastewater data;
- (B) specific, quantified five-year and ten-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. The goals established by wholesale water suppliers under this subparagraph are not enforceable;
- (C) a description as to which practice(s) and/or device(s)will be utilized to measure and account for the amount of water diverted from the source(s) of supply;
- (D) a monitoring and record management program for determining water deliveries, sales, and losses;
- (E) a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system;
- (F) a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of this chapter. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water

will be required to implement water conservation measures in accordance with applicable provisions of this chapter;

- (G) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plans shall include optimization of water supplies as one of the significant goals of the plan;
- (H) a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan; and
- (I) documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.
- (2) Additional conservation strategies. Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of paragraph (1) of this section, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:
- (A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- (B) a program to assist agricultural customers in the development of conservation pollution prevention and abatement plans;
 - (C) a program for reuse and/or recycling of wastewater and/or graywater; and
- (D) any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.
 - (3) Review and update requirements. The wholesale water supplier shall review and update its water conservation plan, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan every five years to coincide with the regional water planning group.

Source Note: The provisions of this §288.5 adopted to be effective May 3, 1993, 18 TexReg 2558; amended to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384; amended to be effective December 6, 2012, 37 TexReg 9515

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TITLE 30 ENVIRONMENTAL QUALITY

<u>PART 1</u> TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT

CONTINGENCY PLANS, GUIDELINES AND

REQUIREMENTS

SUBCHAPTER B DROUGHT CONTINGENCY PLANS

RULE §288.22 Drought Contingency Plans for Wholesale Water Suppliers

- (a) A drought contingency plan for a wholesale water supplier must include the following minimum elements.
 - (1) Preparation of the plan shall include provisions to actively inform the public and to affirmatively provide opportunity for user input in the preparation of the plan and for informing wholesale customers about the plan. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.
 - (2) The drought contingency plan must document coordination with the regional water planning groups for the service area of the wholesale public water supplier to ensure consistency with the appropriate approved regional water plans.
 - (3) The drought contingency plan must include a description of the information to be monitored by the water supplier and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.
 - (4) The drought contingency plan must include a minimum of three drought or emergency response stages providing for the implementation of measures in response to water supply conditions during a repeat of the drought-of-record.
 - (5) The drought contingency plan must include the procedures to be followed for the initiation or termination of drought response stages, including procedures for notification of wholesale customers regarding the initiation or termination of drought response stages.
 - (6) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this paragraph are not enforceable.
 - (7) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:
 - (A) pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, §11.039; and

- (B) utilization of alternative water sources with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).
- (8) The drought contingency plan must include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.
- (9) The drought contingency plan must include procedures for granting variances to the plan.
- (10) The drought contingency plan must include procedures for the enforcement of any mandatory water use restrictions including specification of penalties (e.g., liquidated damages, water rate surcharges, discontinuation of service) for violations of such restrictions.
- (b) The wholesale public water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.
- (c) The wholesale public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as adoption or revision of the regional water plan.

Source Note: The provisions of this §288.22 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384.

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TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT

CONTINGENCY PLANS, GUIDELINES AND

REQUIREMENTS

SUBCHAPTER C REQUIRED SUBMITTALS

RULE §288.30 Required Submittals

In addition to the water conservation and drought contingency plans required to be submitted with an application under §295.9of this title (relating to Water Conservation and Drought Contingency Plans), water conservation and drought contingency plans are required as follows.

- (1) Water conservation plans for municipal, industrial, and other non-irrigation uses. The holder of an existing permit, certified filing, or certificate of adjudication for the appropriation of surface water in the amount of 1,000 acre-feet a year or more for municipal, industrial, and other non-irrigation uses shall develop, submit, and implement a water conservation plan meeting the requirements of Subchapter A of this chapter (relating to Water Conservation Plans). The water conservation plan must be submitted to the executive director not later than May 1, 2005. Thereafter, the next revision of the water conservation plan for municipal, industrial, and other non-irrigation uses must be submitted not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive director within 90 days of adoption. The revised plans must include implementation reports. The requirement for a water conservation plan under this section must not result in the need for an amendment to an existing permit, certified filing, or certificate of adjudication.
- (2) Implementation report for municipal, industrial, and other non-irrigation uses. The implementation report must include:
 - (A) the list of dates and descriptions of the conservation measures implemented;
 - (B) data about whether or not targets in the plans are being met;
 - (C) the actual amount of water saved; and
- (D) if the targets are not being met, an explanation as to why any of the targets are not being met, including any progress on that particular target.

- (3) Water conservation plans for irrigation uses. The holder of an existing permit, certified filing, or certificate of adjudication for the appropriation of surface water in the amount of 10,000 acre-feet a year or more for irrigation uses shall develop, submit, and implement a water conservation plan meeting the requirements of Subchapter A of this chapter. The water conservation plan must be submitted to the executive director not later than May 1, 2005. Thereafter, the next revision of the water conservation plan for irrigation uses must be submitted not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive director within 90 days of adoption. The revised plans must include implementation reports. The requirement for a water conservation plan under this section must not result in the need for an amendment to an existing permit, certified filing, or certificate of adjudication.
 - (4) Implementation report for irrigation uses. The implementation report must include:
 - (A) the list of dates and descriptions of the conservation measures implemented;
 - (B) data about whether or not targets in the plans are being met;
 - (C) the actual amount of water saved; and
- (D) if the targets are not being met, an explanation as to why any of the targets are not being met, including any progress on that particular target.
- (5) Drought contingency plans for retail public water suppliers. Retail public water suppliers shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter (relating to Drought Contingency Plans) to the executive director after adoption by its governing body. The retail public water system shall provide a copy of the plan to the regional water planning group for each region within which the water system operates. These drought contingency plans must be submitted as follows.
- (A) For retail public water suppliers providing water service to 3,300 or more connections, the drought contingency plan must be submitted to the executive director not later than May 1,2005. Thereafter, the retail public water suppliers providing water service to 3,300 or more connections shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive director within 90days of adoption by the community water system. Any new retail public water suppliers providing water service to 3,300 or more connections shall prepare and adopt a drought contingency plan within 180 days of commencement of operation, and submit the plan to the executive director within 90 days of adoption.
- (B) For all the retail public water suppliers, the drought contingency plan must be prepared and adopted not later than May 1, 2005, and must be available for inspection by the executive director upon request. Thereafter, the retail public water suppliers shall

prepare and adopt the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new retail public water supplier providing water service to less than 3,300 connections shall prepare and adopt a drought contingency plan within 180 days of commencement of operation, and shall make the plan available for inspection by the executive director upon request.

- (6) Drought contingency plans for wholesale public water suppliers. Wholesale public water suppliers shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter to the executive director not later than May 1, 2005, after adoption of the drought contingency plan by the governing body of the water supplier. Thereafter, the wholesale public water suppliers shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new or revised plans must be submitted to the executive director within 90 days of adoption by the governing body of the wholesale public water supplier. Wholesale public water suppliers shall also provide a copy of the drought contingency plan to the regional water planning group for each region within which the wholesale water supplier operates.
- (7) Drought contingency plans for irrigation districts. Irrigation districts shall submit a drought contingency plan meeting the requirements of Subchapter B of this chapter to the executive director not later than May 1, 2005, after adoption by the governing body of the irrigation district. Thereafter, the irrigation districts shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any new or revised plans must be submitted to the executive director within 90 days of adoption by the governing body of the irrigation district. Irrigation districts shall also provide a copy of the plan to the regional water planning group for each region within which the irrigation district operates.
- (8) Additional submissions with a water right application for state water. A water conservation plan or drought contingency plan required to be submitted with an application in accordance with §295.9of this title must also be subject to review and approval by the commission.
- (9) Existing permits. The holder of an existing permit, certified filing, or certificate of adjudication shall not be subject to enforcement actions nor shall the permit, certified filing, or certificate of adjudication be subject to cancellation, either in part or in whole, based on the nonattainment of goals contained within a water conservation plan submitted with an application in accordance with §295.9 of this title or by the holder of an existing permit, certified filing, or certificate of adjudication in accordance with the requirements of this section.
- (10) Submissions to the executive administrator of the Texas Water Development Board.

- (A) Water conservation plans for retail public water suppliers. For retail public water suppliers providing water service to 3,300 or more connections, a water conservation plan meeting the minimum requirements of Subchapter A of this chapter and using appropriate best management practices must be developed, implemented, and submitted to the executive administrator of the Texas Water Development Board not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. Any revised plans must be submitted to the executive administrator within 90 days of adoption by the community water system. Any new retail public water suppliers providing water service to 3,300 or more connections shall prepare and adopt a water conservation plan within 180 days of commencement of operation, and submit the plan to the executive administrator of the Texas Water Development Board within 90 days of adoption.
- (B) Water conservation coordinators for retail public water suppliers. Retail public water suppliers that provide potable water to 3,300 or more connections shall designate a person as the water conservation coordinator responsible for implementing the water conservation plan; and identify, in writing, the water conservation coordinator, including the contact information for that person, to the executive administrator of the Texas Water Development Board. Notification of the initial designated water conservation coordinator shall be provided as specified by the Texas Water Development Board and any changes to the water conservation coordinator shall be provided within 90 days of the effective date of the change.
- (C) Water conservation plans. Each entity that is required to submit a water conservation plan to the commission shall submit a copy of the plan to the executive administrator of the Texas Water Development Board not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group.
- (D) Annual reports. Each entity that is required to submit a water conservation plan to the Texas Water Development Board or the commission, shall file a report not later than May 1, 2010, and annually thereafter to the executive administrator of the Texas Water Development Board on the entity's progress in implementing the plan.
 - (E) Violations of the Texas Water Development Board's rules. The water conservation plans and annual reports shall comply with the minimum requirements established in the Texas Water Development Board's rules. The Texas Water Development Board shall notify the commission if the Texas Water Development Board determines that an entity has not complied with the Texas Water Development Board rules relating to the minimum requirements for water conservation plans or submission of plans or annual reports. The commission shall take appropriate enforcement action upon receipt of notice from the Texas Water Development Board.

Source Note: The provisions of this §288.30 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to

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be effective October 7, 2004, 29 TexReg 9384; amended to be effective January 10, 2008, 33 TexReg 193; amended to be effective August 16, 2018, 43 TexReg 5218

TCEQ Requirements and Location in This Plan

Minimum Conservation Plan Requirements

The minimum requirements in the Texas Administrative Code for Water Conservation Plans for Wholesale Public Water Suppliers are covered in this report as follows:

- 288.5(a)(1)(A) Profile form including description of service area, customer data, water use data, etc. Section 2.2 and Appendix D
- 288.5(a)(1)(B) Specific, quantified five-year and ten-year targets Section 2.3
- 288.5(a)(1)(C) Metering devices Section 2.4
- 288.5(a)(1)(D) Monitoring and record management program Section 2.5
- 288.5(a)(1)(E) Metering and leak detection and repair program Section 2.6
- 288.5(a)(1)(F) Contract requirements Section 2.7
- 288.5(a)(1)(G) Reservoir systems operation plan Section 2.8
- 288.5(a)(1)(H) Means for implementation and enforcement Section 2.10
- 288.5(a)(1)(I) Coordination with the regional planning groups Section 1.5 and Appendix C
- 288.5(3) Review and Update of Plan Section 1.4

Minimum Drought Contingency Plan Requirements

The minimum requirements in the Texas Administrative Code for Drought Contingency Plans for Wholesale Public Water Suppliers are covered in this report as follows:

- 288.22(a)(1) Provisions to actively inform the public and to provide opportunity for user input in the preparation of the plan and for informing wholesale customers about the plan Section 3.2
- 288.22(a)(2) Document coordination with the regional water planning groups Section 1.5 and Appendix C
- 288.22(a)(3) Description of information to be monitored by the water supplier and specific criteria for initiation and termination of drought response stages Sections 3.3 and 3.4
- 288.22(a)(4) Include a minimum of three drought or emergency response stages providing for the implementation of measures in response to water supply conditions – Section 3.3
- 288.22(a)(5) Include the procedures to be followed for the initiation or termination of drought response stages, including procedures for notification of wholesale customers regarding the initiation or termination of drought response stages Section 3.5

- 288.22(a)(6) Include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought Section 3.6
- 288.22(a)(7) Include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following Section 3.4
 - 288.22(a)(7)(A) Pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, § 11.039; and – Section 3.5
 - o 288.22(a)(7)(B) Utilization of alternative water sources with the prior approval of the TCEQ executive director as appropriate Sections 3.4 and 3.5
- 288.22(a)(8) Include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, § 11.039 Section 3.5
- 288.22(a)(9) Include procedures for granting variances to the plan Section 3.7
- 288.22(a)(10) Include procedures for the enforcement of any mandatory water use restrictions including specification of penalties for violations of such restrictions – Section 3.8
- 288.22(b) The wholesale public water supplier shall notify the TCEQ executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan Section 3.4
- 288.22(c) The wholesale public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information Section 1.4

Required Submittals

- 288.30(1) Water Conservation Plan for Municipal, Industrial, and Other Non-Irrigation Uses Section 2
- 288.30(2) Water Conservation Implementation Report Not Applicable
- 288.30(3) Water Conservation Plan for Irrigation Uses Not Applicable
- 288.30(4) Implementation Report for Irrigation Users Not Applicable
- 288.30(5) Drought Contingency Plans for Retail Water Providers– Not Applicable
- 288.30(6) Drought Contingency Plans for Wholesale Water Providers Section 3
- 288.30(7) Drought Contingency Plans for Irrigation Districts Not Applicable
- 288.30(8) Water Right Application Not Applicable
- 288.30(9) Existing Permit Holder Not Subject to Enforcement Actions for Non-Attainment of Water Conservation Goals Noted
- 288.30(10)(A)–(B) Not Applicable

• 288.30(10)(C)–(E) – Submissions to the Texas Water Development Board – Section 1.4 and Noted

APPENDIX C Letter to Region I Regional Water Planning Group



Nacogdoches County

GREG SOWELL

County Judge

Commissioners Jerry Don Williamson, Pct. 1 Sandy McCorvey, Pct. 2

Shannon L. Burkley Court Administrator Commissioners Robin Dawley, Pct. 3 Mark Harkness, Pct. 4

July 17, 2019

Mr. Kelley Holcomb Chair, Region I Regional Water Planning Group 2901 N. John Redditt Drive Lufkin, TX 75904

Dear Mr. Holcomb:

Enclosed please find a copy of the 2019 Water Conservation and Drought Contingency and Water Emergency Response Plan for the proposed Lake Naconiche Regional Water Supply in Nacogdoches County. I am submitting a copy of this plan to the Region I Regional Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

Sincerely

Greg Sowell County Judge

GS/slb Enclosure

APPENDIX D Water Utility Profile



Texas Commission on Environmental Quality

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

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

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

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

Contact Information

Name:	Nacogdoches County			
Address:	101 West Main Street, Nacogdoches, Texas 75961			
Telephone Number:	(936) 560-7755	Fax: (936) 560-7841		
Water Right No.(s):	06-5585			
Regional Water Planning Group:	East Texas Regional Water Planning Group			
Person responsible for implementing conservation program:	Nacogdoches County Judge	Phone: (936) 560-7755		
Form Completed By:	simone Kiel, P.E.			
Title:	Engineer			
Signature:	the source	Date: 7 1/7/19		

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

- A. Population and Service Area Data:
 - 1. Service area size (in square miles):

981*

*Size of Nacogdoches County.

See Figure 2-2 in Section 2.2 of Water Conservation Plan for map of service area

2. Current population of service area:

The 2018 population of Nacogdoches County is 65,711 based on Census estimate. No population is currently being served by Nacogdoches County.

- 3. Current population served for:
 - a. Water: N/A
 - b. Wastewater: N/A

Not applicable. No population is currently being served by Nacogdoches County.

Population served for previous five years:

5.	Projected population for service area
	in the following decades:

Year	Population	
	-	
-	-	
-		
-		
-		

Population
18,421
20,694
22,936
25,324
27,846

6. List source or method for the calculation of current and projected population size.

Since this is a proposed water supply, a population has not been previously served for the past five years. Projected population was calculated by totaling the adopted decadal 2021 Region I population projections for, Appleby WSC, Caro WSC, Nacogdoches County-Other, Lilly Grove SUD, and Swift WSC. which were identified by the East Texas Regional Water Planning Group as potential customers.

D	Cuntaman	Data
B. 1	Customer	Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

Not applicable. No contracts for this water supply have been developed, so there are no wholesale customers, contracted amounts, or previous water deliveries.

Wholesale Customer	Contracted Amount (Acre-feet)	Previous Year Amount of Water Delivered (acre-feet)
-	-	
-		
-		-

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

The water that will be delivered in the future will be <u>raw water</u>. No water has been delivered from this water supplier over the previous five years.

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet): *Not applicable.*

Year	Treated Water	Raw Water
	-	
Totals	-	

B. Water Accounting Data

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Not applicable. No water has been diverted at the point of diversion(s) from this water supply over the previous five years.

Year	-	-		-	
Month					
January		-	-	-	
February			-	-	
March		-			_
April	•			-	
May	-	-		-	
June	-		-	-	-
July				-	-
August	-		-		-
September	-	-			-
October	-	_	•	-	_
November					
December					
Totals	-			-	-

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Not applicable. No wholesale population has been served and no water has been diverted for municipal use from this water supply over the previous five years.

	Year	Total Population Served	Total Annual Water Diverted for Municipal Use
·	-	-	
	-		•
	-	-	
_			-
	-	•	-

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	Source	Amount Authorized
Surface Water	Lake Naconiche	4,750 (pending water right amendment)
Groundwater _		
Other	-	•

- B. Treatment and Distribution System (if providing treated water)
 - 1. Design daily capacity of system (MGD): Not applicable.
 - 2. Storage capacity (MGD): Not applicable
 - a. Elevated -
 - b. Ground -
 - Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

Not applicable

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

Not applicable.

1. Design capacity of wastewater treatment plant(s) (MGD):

Not applicable

 Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

Not applicable

B. Wastewater Data for Service Area (if applicable)

Percent of water service area served by wastewater system: Not applicable

1. Monthly volume treated for previous five years (in 1,000 gallons):

Year			-	-	-
Month					
January	-	-		-	-
February			1 4.		
March	-	-			
April					
May					
June					
July	-				
August					-
September					-
October					
November					
December			-	-	
Totals	-	-			

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and Official Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the	(name of water supplier)	is located within the
(name of regional water planning a	area or areas) and	(name of water supplier) has
provided a copy of this water conse	ervation plan to the	(name of regional water
planning group or groups).		

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
- 3. A program for reuse and/or recycling of wastewater and/or graywater;
- 4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

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

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- 1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- 2. evaluates conservation as an alternative to the proposed appropriation; and
- evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

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

APPENDIX ECounty Commissioner's Court Resolution

2019 Nacogdoches County Resolution Approval and Adoption of the 2019 Water Conservation, Drought Contingency and Water Emergency Response Plan

WHEREAS, Nacogdoches County (the "County") owns Water Use Permit No. 5855 and is currently seeking to amend such permit;

WHEREAS, the County understands the need to conserve its water supplies and be prepared to manage its water supplies in drought conditions;

WHEREAS, the Texas Water Code and regulations of the Texas Commission on Environmental Quality ("TCEQ") require the County to adopt a water conservation plan and a drought contingency plan in order to evaluate the County's pending water right application to amend Water Use Permit No. 5855;

WHEREAS, the County wishes to comply with the TCEQ rules and has prepared the 2019 Water Conservation, Drought Contingency and Water Emergency Response Plan (the "2019 Plan");

WHEREAS, the County will ensure its water supply contracts with all its wholesale customers include a provision that require wholesale customers to enforce the provisions of the 2019 Plan against their retail customers; and

WHEREAS, the County has reviewed the 2019 Plan and desires to approve and adopt the 2019 Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE NACOGDOCHES COUNTY COMMISSIONER'S COURT THAT:

- The 2019 Plan is approved and adopted by the Commissioner's Court.
- The County Judge is hereby authorized and directed on behalf of the Commissioner's Court to arrange for the implementation of and the filing of the 2019 Plan as required by TCEQ rules and regulations.

PASSED, ADOPTED AND APPROVED THIS 17th day of July, 2019.

NACOGDOØHES COUNTY COMMISIONERS COURT

Greg Sowell, County Judge

Ferry Williamson, Commissioner Pct 1

Sandy McCorvey, Commissioner Pct 2

Robin Dawley, Commissioner Pct 3

Mark Harkness, Commissioner Pct 4

ATTEST:

June Clifton, County Clerk

APPENDIX F Water Rights Certificate

THE STATE OF TEXAS COUNTY OF TRAVIS

TEXAS NATURAL RESOURCE CONSERMALLON CONSERVATION CONSERVA

permanent records of the Commission.

Given under my hand and the seal of office or

Rugenia K. Brumm, Chief Clork Texas Natural Resource Conservation Commission

COPY

PERMIT TO APPROPRIATE AND USE STATE WATER

APPLICATION NO. 5585

PERMIT NO. 5585

TYPE: Section 11.121

Name:

County of Nacogdoches

Address:

101 West Main Street

Nacogdoches, Texas 75961

Filed:

April 30, 1997

County:

Nacogdoches 1 4 1

Purposes:

Flood Control and

Recreation

Watershed:

Neches River Basin

Watercourse:

Naconiche Creek, tributary of Attoyac Bayou, tributary

of the Angelina River,

tributary of the Neches River

WHEREAS, the County of Nacogdoches has requested authorization to construct and maintain a dam on Naconiche Creek creating a reservoir to be used for flood control and in-place recreation purposes in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas; and

WHEREAS, the dam will be constructed by the Natural Resource Conservation Service (NRCS) and is referred to as Multi-Purpose Structure No. 23-A; and

WHEREAS, the Texas Natural Resource Conservation Commission finds that it has jurisdiction over the application; and

WHEREAS, the Executive Director has determined that although there may be some anticipated temperature differences in Naconiche Creek resulting from the construction of the proposed reservoir, these differences will probably be dissipated downstream due to springflow, seepage and vegetative cover; and

WHEREAS, the Executive Director has determined and recommended that in order to protect habitat and water quality at the reservoir site and downstream of the dam, certain special conditions be included in the permit; and

WHEREAS, the Stephen F. Austin School of Forestry has agreed to manage and monitor a wetland area around the perimeter of the reservoir in accordance with a "Final Monitoring Plan" dated May 14, 1998 that states it is intended and predicted to result in the conversion of 176 acres of land owned by the permittee to hydric soil condition due to increased saturation, thereby allowing more than 50% of the dominant vegetation of the area to propagate into obligate wetland, facultative wetland or facultative plants; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Natural Resource Conservation Commission in issuing this permit.

NOW, THEREFORE, this permit to appropriate and use State water is issued to the County of Nacogdoches, subject to the following terms and conditions:

I. IMPOUNDMENT

Permittee is authorized to construct and maintain a dam creating a reservoir in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas, on Naconiche Creek and to impound therein not to exceed 9072 acre-feet of water at a normal maximum operating elevation of 348.0 feet above mean sea level. The dam will be in the William C. Walker Survey, Abstract No. 596 and the Maria D. Castro Survey, Abstract No. 133 and Station 0+00 on the centerline of the dam at Latitude 31.7708° N and Longitude 94.5694° W, which is also N 27° W, 2650 feet from the southwest corner of the aforesaid Castro survey.

2. *USE*

Permittee is authorized to use the lake only for flood control and in-place recreational purposes with no diversion right.

3. TIME LIMITATIONS

- a. Construction of the dam herein authorized shall be commenced within two years and completed within five years from date of issuance of this permit. For the purposes of this permit, commencement of construction includes site preparation.
- b. Failure to commence and/or complete construction of the dam within the period stated above shall cause this permit to expire and become null and void, unless permittee applies for an extension of time to commence and/or complete construction prior to the respective deadlines for commencement and completion, and the application is subsequently granted.

4. SPECIAL CONDITIONS

- a. Permittee is responsible for the continuing maintenance and repair of the dam authorized herein.
- b. Permittee shall pass inflows of State water past the reservoir in such quantities as are necessary to satisfy the rights of downstream domestic and livestock users and the senior and superior rights of other authorized water users.
- c. In order to compensate for impacts to wetlands due to the construction of the aforesaid reservoir, permittee shall:
 - i. implement the mitigation plan developed and described in NRCS' draft and final "Supplemental Environmental Impact Statement for Attoyac Bayou Watershed in Nacogdoches, Rusk, Shelby and San Augustine Counties, Texas", which includes the purchase and preservation of an 852-acre tract of land (bottomland hardwoods) in the Angelina River Bottom;
 - ii. implement the May 14, 1998 "Final Monitoring Plan" for the "Lake Naconiche Created Wetlands" prepared by the permittee and the Stephen F. Austin School of Forestry, which includes monitoring and annual reporting to the Executive Director of the vegetation, soils and hydrology of approximately 176 acres of land owned by permittee around the perimeter of the proposed reservoir;
 - iii. achieve the Minimum Success Criteria" included on Page 4 of the referenced "Final Monitoring Plan" for the 176 acres of land around the perimeter of the reservoir within ten years after initial filling of the proposed reservoir and provide a report to the Executive Director documenting this achievement; and
 - iv. manage the lands included in the mitigation plan and in the monitoring plan in perpetuity, either by permittee or by its designee, so as to insure that these lands have no use inconsistent with the preservation of wetlands and wildlife habitat.
 - d. To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir:

December5 cfs	March15 cfs	June4 cfs
January8 cfs	April11 cfs	
February12 cfs	Мау9 cfs	

This permit is issued subject to all superior and senior water rights in the Neches 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 Natural Resource Conservation Commission and to the right of continuing supervision of State water resources exercised by the Commission.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Issue Date: JUL 03 1998

For the Commission

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY TELEPHONE MEMO TO THE FILE

Please complete with typewriter or black pen.

Call to: Sara Thornton Call from: Silia E. Been
Date of call: July 16, 2019 File no.: WRPERM 5585
Phone no.: (Subject: Nacagachas County
Cons + Drought Plans
S.
Information for file:
el Called to check on status of Conservation of
Drought Contingency Plan regreivements
Prought Contingency Plan requeirements
The County meeting is told this evening
to approve plans, Sara Thornton
Jelieves they will be approved. She will forward them immodicately once approved
Gorward their immodicately once
approved
Signed Luce & Bue R. D.



816 Congress Avenue, Suite 1900 Austin, Texas 78701

Telephone: (512) 322-5800 Facsimile: (512) 472-0532

VIA FIRST-CLASS MAIL

AND ELECTRONIC TRANSMISSION

www.lglawfirm.com

Ms. Thornton's Direct Line: (512) 322-5876

April 17, 2019

Dr. Lillian E. Beerman
Water Rights Permitting Team (MC 160)
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Nacogdoches County

WRPERM 5585; CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County (2733-2)

Dear Dr. Beerman:

Thank you for your time on April 5, 2019 to discuss the requirement to prepare a water conservation plan and a drought contingency plan (the "Plans") for Nacogdoches County's above-referenced application. The County has retained Freese and Nichols, Inc. to prepare the Plans, and given the time associated with preparing the Plans, expects to submit those Plans to TCEQ by July 1, 2019 for TCEQ's review.

On behalf of the County, we appreciate your efforts in reviewing and processing this application. If you should have any questions, please do not hesitate to contact me.

Sincerely,

Sara R. Thornton

SRT/plh

cc: The Honorable Greg Sowell

Mr. Keith Bradford Ms. Simone Kiel











1 of 11

Paige Hamilton From:

Wednesday, April 17, 2019 8:14:53 PM Sent on:

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

CC: Sara Thornton <

Subject: Information re: Nacogdoches County's Application for Amendment to Water Use Permit

5585 (2733-2)

Attachments: 2019.04.17 SRT to TCEQ, L. Beerman re Nacogdoches Co. Appl. Permit 5585 Resp re

WCP DCP.pdf (450.79 KB)

Dr. Beerman,

Please find attached correspondence from Sara Thornton pursuant to Nacogdoches County's application for an amendment to Water Use Permit 5585. A hard copy is being mailed to you today.

Please don't hesitate to contact us if you have any questions.

Thanks,

Paige



PAIGE L. HAMILTON

Paralegal 512-322-5828 Direct Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Ave., Suite 1900, Austin, TX 78701

| 512-322-5800

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****ATTENTION TO PUBLIC OFFICIALS AND OFFICIALS WITH OTHER INSTITUTIONS SUBJECT TO THE OPEN **MEETINGS ACT ******

A "REPLY TO ALL" OF THIS EMAIL COULD LEAD TO VIOLATIONS OF THE TEXAS OPEN MEETINGS ACT. PLEASE REPLY ONLY TO LEGAL COUNSEL.



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April 17, 2019

Dr. Lillian E. Beerman
Water Rights Permitting Team (MC 160)
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Nacogdoches County

WRPERM 5585; CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

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Naconiche Creek, Neches River Basin

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On behalf of the County, we appreciate your efforts in reviewing and processing this application. If you should have any questions, please do not hesitate to contact me.

Sincerely,

Sara R. Thornton

SRT/plh

cc: The Honorable Greg Sowell

Mr. Keith Bradford Ms. Simone Kiel











1 of 3

Sara Thornton From:

Sent on: Monday, April 15, 2019 3:25:26 PM

To: Lillian Beerman <Lillian.Beerman@Tceq.Texas.Gov>; Simone Frey Kiel

<Simone Frey Kiel

CC: Paige Hamilton

Subject: RE: Nacogdoches County WRPERM-5585A April 5th Conference Call

Hi Lillian,

Apologize for the delay, but I am currently working to make sure that the County has sufficient budget for preparing the water conservation and drought contingency plans. I am waiting to hear back from them on this issue and once I do we'll get a letter quickly turned around to you.

Thanks,

Sara



SARA R. THORNTON

Principal 512-322-5876 Direct Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Ave., Suite 1900, Austin, TX 78701

| 512-322-5800

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

Sent: Monday, April 8, 2019 2:55 PM

To: Sara Thornton >; Simone Frey Kiel

Cc: Paige Hamilton

Subject: Nacogdoches County WRPERM-5585A April 5th Conference Call

Sara Thornton and Simone Frey Kiel,

We await your Supplemental Response to WAD's Request for Information this week.

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

I have attached a copy of the phone numbers of staff present at the conference call.

From: Lillian Beerman <Lillian.Beerman@Tceq.Texas.Gov> on behalf of Lillian Beerman

Monday, April 8, 2019 7:54:33 PM Sent on:

Sara Thornton < To:

Simone Frey Kiel

CC: Paige Hamilton <

Nacogdoches County WRPERM-5585A April 5th Conference Call Subject: Attachments: Nacogdoches_County_5585A_Conf_Call_04.05.2019.pdf (301.7 KB)

Sara Thornton and Simone Frey Kiel,

We await your Supplemental Response to WAD's Request for Information this week. If you have any questions or concerns, please do not hesitate to contact me. I have attached a copy of the phone numbers of staff present at the conference call.

Thank you, Lillian

Lillian E. Beerman, Ph.D., M.F.S.

Project Manager, Water Rights Permitting

Water Availability Division MC-160

Texas Commission on Environmental Quality

12100 Park 35 Circle, Bldg. F, 3rd Floor

Austin, Texas 78753

lillian.beerman@tceq.texas.gov

: (512) 239-4019



Nacogdoches County Application No. 5585A to Amend WRPERM 5585 April 5, 2019 Room F 3107A

Name	Company	Contact (Phone/email)
Chris Kozlowsa	Teece	512-239-1801
Kathy Alexander	TCEQ	512-239-0778
Trent Jennings	TCEQ	# 6857
Trent Jennings Dason Godeaux	TCEQ	512-239-2495
Kayla Murray	TCER	×4761
Dinniah Tadema	TCER/ELD	X 0617
Lillian E. Beerman	TCEQ	x 4019

Nacogdoches County Application 5585A to Amend WRPERM 5585 Conference Call Notes April 5, 2019

Attorney for Applicant, Sara Thornton, JD, expressed concern about ability to complete Utility Profile and Conservation and Drought Contingency Plan because the do not yet know who their customers and have no historic information on which to base their plan.

"this is a new water right, there is no historical information"

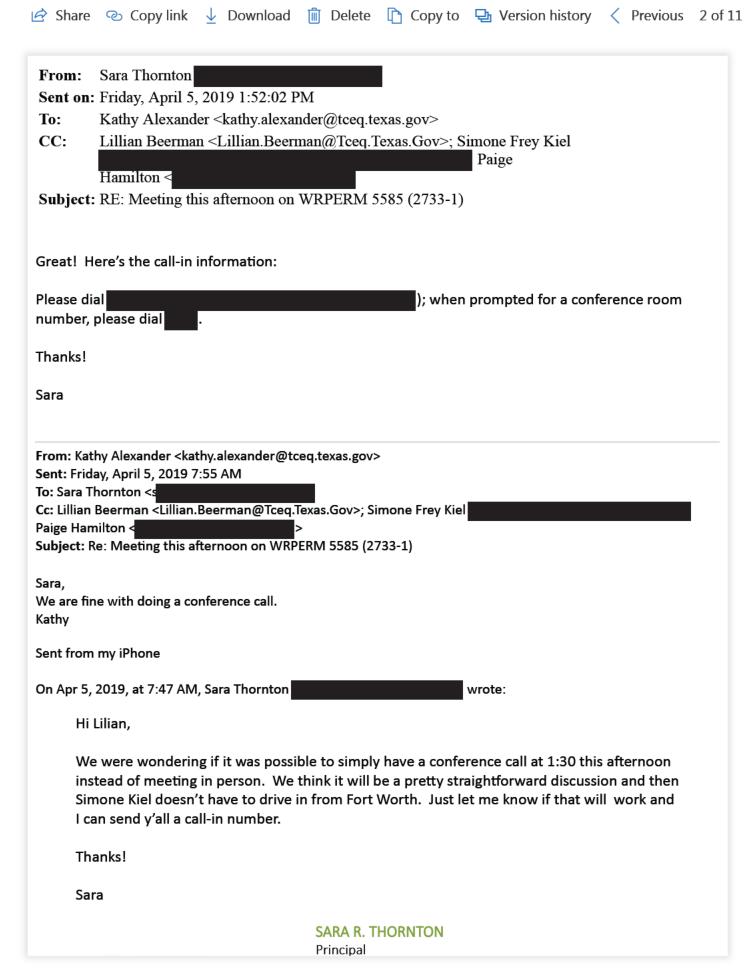
KA: Advised them "do not fill out like it is a speculative water right.

Aware that they cannot respond to every question and that they need time for the approval of the County Commission.

Provide TCEQ with Timeframes; they are developing a plan and will present it to the County Board in June. Get it on the Agenda. That is sufficient to grant them an extension.

Send TCEQ a "supplement" to the previous RFI response. State when time is available on the agenda before the county commissioner's court. Provide TCEQ with a schedule.

There was agreement that Thornton would provide a draft conservation plan, etc. by next week.







Sara Thornton From:

Sent on: Friday, April 5, 2019 12:47:24 PM

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

CC: Kathy Alexander < kathy.alexander@tceq.texas.gov>; Simone Frey Kiel

Paige

Hamilton

Subject: Meeting this afternoon on WRPERM 5585 (2733-1)

Hi Lilian,

We were wondering if it was possible to simply have a conference call at 1:30 this afternoon instead of meeting in person. We think it will be a pretty straightforward discussion and then Simone Kiel doesn't have to drive in from Fort Worth. Just let me know if that will work and I can send y'all a call-in number.

Thanks!

Sara



SARA R. THORNTON

Principal 512-322-5876 Direct Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Ave., Suite 1900, Austin, TX 78701

| 512-322-5800

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CONFIDENTIALITY NOTICE:

This email (and all attachments) is confidential, legally privileged, and covered by the Electronic



816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800

Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

Ms. Thornton's Direct Line: (512) 322-5876

March 22, 2019

Dr. Lillian E. Beerman
Water Rights Permitting Team (MC 160)
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

VIA FIRST-CLASS MAIL
AND ELECTRONIC TRANSMISSION

Re:

Nacogdoches County

WRPERM 5585; CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County (2733-2)

Dear Dr. Beerman:

This letter is submitted on behalf of my client, Nacogdoches County (the "County"), as a response to the Request for Information (the "RFI") that we received from the Texas Commission on Environmental Quality (the "TCEQ") dated February 21, 2019, in connection with the above-referenced application (the "Application").

Response to Request No. 1:

1. Provide a completed Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers, (TCEQ Form No. 20162) that complies with Title 30 Texas Administrative Code (TAC) § 288.5.

Please find enclosed as **Exhibit A** the memorandum prepared by Freese and Nichols that addresses this request. Included as <u>Attachment 1</u> to that exhibit is the TCEQ template for the *Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers*.

Response to Request No. 2:

2. Provide a completed Drought Contingency Plan for a Wholesale Public Water Supplier (TCEQ Form No. 20193) that complies with Title 30 TAC § 288.22.

MAR 25 2019

Water Availability Division

Dr. Lillian E. Beerman March 22, 2019 Page 2

Please refer to the previously referenced **Exhibit A** for a response to this request. Included as <u>Attachment 1</u> to that exhibit is the TCEQ template for the *Drought Contingency Plan for a Wholesale Public Water Provider*.

On behalf of the County, we trust this information is useful and affirmatively addresses the matters included in the RFI. Please do not hesitate to contact me if you have any questions.

Sincerely,

Sara R. Thornton

SRT/plh 7813359 ENCLOSURES

cc: The Honorable Greg Sowell

Mr. Keith Bradford Ms. Simone Kiel

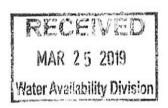
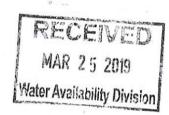


Exhibit A



MEMORANDUM



4055 International Plaza, Suite 200 · Fort Worth, Texas 76109 · 817-735-7300 · fax 817-735-7492

www.freese.com

TO:

Sara Thornton

CC:

Jeremy Rice

FROM:

Simone Kiel

SUBJECT:

Response to TCEQ RFI on Application No. 5585A to Amend Water Use Permit No. 5585,

dated February 21, 2019

DATE:

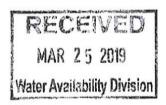
March 20, 2019

PROJECT: LGB14501

On February 21, 2019, the Texas Commission on Environmental Quality (TCEQ) issued a request for additional information associated with the water right Application No. 5585A for Nacogdoches County. Specifically, the TCEQ requested a completed Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers and a completed Drought Contingency Plan for a Wholesale Public Water Provider. Both documents are required of public wholesale water providers and are required as part of a new or amended water right application for new appropriations for wholesale water providers that provide 1,000 acre-feet or more of water supplies.

Currently, Nacogdoches County (or County) does not have a water right for diversions of 1,000 acre-feet per year or more. Since Nacogdoches County does not meet this requirement, the County is not required to develop a water conservation plan or drought contingency plan today. Should the TCEQ grant Nacogdoches County the water right amendment, Nacogdoches County will prepare the appropriate water conservation and drought contingency plans required for wholesale water providers that provide more than 1,000 acre-feet per year of water. The County will use the TCEQ templates as the basis of the required plans. Copies of the TCEQ templates for the Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers and the Drought Contingency Plan for a Wholesale Public Water Provider are included in Attachment 1. This requirement is also addressed in Section 4.5 of the Supporting Report that was submitted with the water right application.

As proffered in the TCEQ letter, we respectfully request the TCEQ to reassess the necessity of the requested data at this time.



Attachment 1

Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers and the Drought Contingency Plan for a Wholesale Public Water Provider Templates



Contact Information

Texas Commission on Environmental Quality

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

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

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

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

Name: Click to add text Address: Telephone Number: Fax: (Water Right No.(s): Regional Water Planning Group: Person responsible for implementing conservation program: Phone: (Form Completed By: Title: Signature: Date:

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SESTEE BERVICE AREA TOTO	LATION AND COSTONE	CDAIA	
1. Po	pulation and Service Area Do	nta:		
1.	Service area size (in square	miles):		
	(Please attach a copy of serv	vice-area map)		
2.	Current population of servi	ca aran		
۷.	current population of servi	ce area.		
_				
3.	Current population served f	or:		
	a. Water			
	b. Wastewater			
4.	Population served for previo	ous five 5.		lation for service area
	years:		in the following	decades:
	Year Popula	<u>tion</u>	Year	Population
			2020	
			2030	
			2040	
			2050	
200			2060	
6.	List source or method for th	e calculation of current an	ıd projected popu	ılation size.
Cus	stomer Data			
	t (or attach) the names of all		ount of annual c	ontract, and amount
of a	annual use for each customer	for the previous year:		
		Contracted Amount	Previous Year	r Amount of
	Wholesale Customer	(Acre-feet)	Water Deliver	ed (acre-feet)

B.

A. Water Delivery		
Indicate if the water p	provided under wholesale contra	acts is treated or raw water and th
amounts for the previ	ous five years (in acre feet):	
Year	Treated Water	Raw Water
		_
Totals		
acre-feet) for all wa	ater uses:	ersion(s) for the previous five year
acre-feet) for all wa	ater uses:	
	ater uses:	
Year	ater uses:	
Year Month		
Year Month January		
Year Month January February		
Year Month January February March		
Year Month January February March April		
Year Month January February March April May		
Year Month January February March April May June		
Year Month January February March April May June July		
Year Month January February March April May June July August		
Year Month January February March April May June July August September		

		Year	Total Population Served	Total Annual Water Diverted for Municipal Use
<i>C.</i> .	Proje	cted Water Deman	ds	
	in se	formation such as	population trends, historical	nands for the next ten years using water use, and economic growth in tl ional water supply requirements fron
. WA	TER S	SUPPLY SYSTEM D	OATA	
		SUPPLY SYSTEM D		*
A. A	Proje	cted Water Deman	ds	s authorized (in acre feet) with each.
A. I	Proje	cted Water Deman	ds	s authorized (in acre feet) with each. Amount Authorized
A. I	<i>Projec</i> List a	cted Water Deman	ds pply sources and the amounts	
A. I	Project List a	cted Water Deman ll current water su Water Type	ds pply sources and the amounts	
A. A	Project List al S	cted Water Demand Il current water su Water Type Surface Water	ds pply sources and the amounts	
A. I	Project List al S	cted Water Demand Il current water su Water Type Surface Water Groundwater	ds pply sources and the amounts	
A. 1	Project List a S C	cted Water Demand Il current water su Water Type Surface Water Groundwater Other	ds pply sources and the amounts	Amount Authorized
A. 1	Project List a S C C	cted Water Demand Il current water su Water Type Surface Water Groundwater Other	ds pply sources and the amounts Source	Amount Authorized
A. 1	Project List a S C C	cted Water Demand Il current water su Water Type Surface Water Groundwater Other	pply sources and the amounts Source tion System (if providing treate	Amount Authorized
B. 7	Project List a S C C	cted Water Demand Il current water su Water Type Surface Water Groundwater Other	pply sources and the amounts Source tion System (if providing treate y of system (MGD):	Amount Authorized
B. 7	Project List a S C C	cted Water Demand Il current water su Water Type Surface Water Groundwater Other ment and Distributes esign daily capacity	pply sources and the amounts Source tion System (if providing treate y of system (MGD):	Amount Authorized

3.	Please attach a description of the water system. Include the number of treatment plants	ì,
	wells, and storage tanks	

IV. WASTEWATER SYSTEM DATA

- A. Wastewater System Data (if applicable)
 - 1. Design capacity of wastewater treatment plant(s) (MGD):
 - 2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.
- B. Wastewater Data for Service Area (if applicable)
 - 1. Percent of water service area served by wastewater system:
 - 2. Monthly volume treated for previous five years (in 1,000 gallons):

Year			
Month			
January		0	
February			1
March			
April			
May			
June	 		
July			
August			
September	 		
October			
November			
December			
Totals	 		

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and Official Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the ______ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
- 3. A program for reuse and/or recycling of wastewater and/or graywater;
- 4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

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

- 1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- 2. evaluates conservation as an alternative to the proposed appropriation; and
- 3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

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



Texas Commission on Environmental Quality

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

Drought Contingency Plan for a Wholesale Public Water Supplier

This form is provided as a model of a drought contingency plan for a wholesale public water supplier. If you need assistance in completing this form or in developing your plan, please contact the Conservation Staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Drought Contingency Plans must be formally adopted by the governing body of the water provider and documentation of adoption must be submitted with the plan. For example, adoption by a city council as an ordinance or by resolution of the entity's board of directors adopting the plan as administrative rules.

Name:	_Click t	o add text
Address:		
Telephone Nur	nber: ()	Fax: ()
Water Right No	.(s):	
Regional Water	Planning Group:	
Form Complete	d by:	
Title:		
Person respons implementation		Phone: ()
Signature:	<u></u>	Date: / /
	eclaration of Policy, Purpo	
with particular re public health, we water supply er	egard for domestic water us elfare, and safety and mini	oply and/or to protect the integrity of water supply facilities, se, sanitation, and fire protection, and to protect and preserve mize the adverse impacts of water supply shortage or other (name of your water supplier) adopts the following
Section II: Pt	ıblic Involvement	

Opportunity for the public and wholesale water customers to provide input into the preparation of the Plan was provided by ____ (name of your water supplier) by means of ____ (describe methods used to inform the public and wholesale customers about the preparation of the plan and opportunities for input; for example, scheduling and proving public notice of a public meeting to accept input on the Plan).

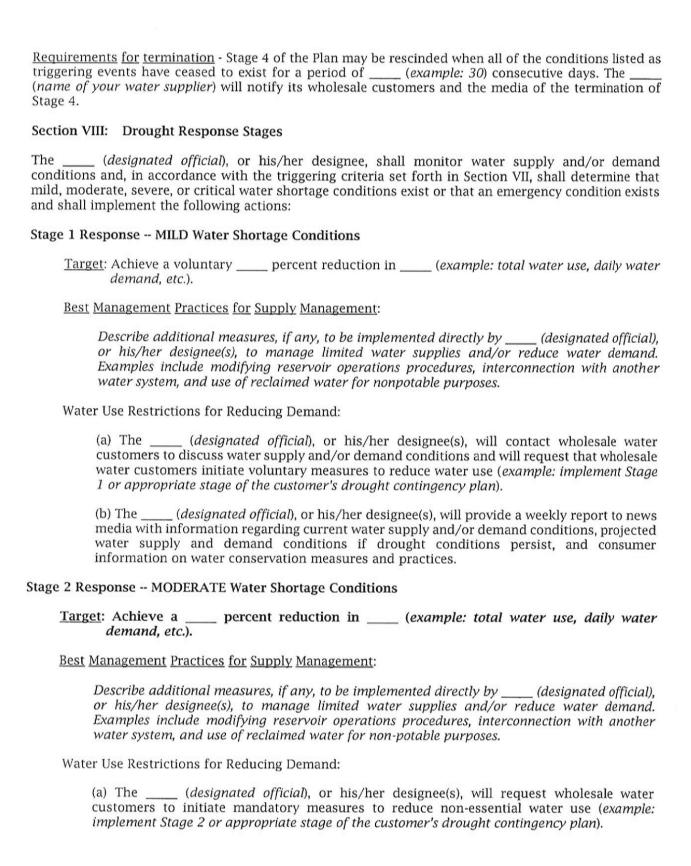
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	Section III: Wholesale Water Customer Education
	The (name of your water supplier) will periodically provide wholesale water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of (example: describe methods to be used to provide customers with information about the Plan; for example, providing a copy of the Plan or periodically including information about the Plan with invoices for water sales).
	Section IV: Coordination with Regional Water Planning Groups
	The water service area of the (name of your water supplier) is located within the (name of regional water planning area or areas) and the (name of your water supplier) has provided a copy of the Plan to the (name of your regional water planning group or groups).
	Section V: Authorization
	The (designated official; for example, the general manager or executive director), or his/her designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.
	Section VI: Application
	The provisions of this Plan shall apply to all customers utilizing water provided by the (name of your water supplier). The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.
	Section VII: Criteria for Initiation and Termination of Drought Response Stages
	The (designated official), or his/her designee, shall monitor water supply and/or demand conditions on a (example: weekly, monthly) basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by mail or telephone. The news media will also be informed.
•	The triggering criteria described below are based on:
	 (provide a brief description of the rationale for the triggering criteria; for example, triggering criteria are based on a statistical analysis of the vulnerability of the water source under drought of record conditions).
1	Utilization of alternative water sources and/or alternative delivery mechanisms:
(Alternative water source(s) for (name of utility) is/are: (Examples: Other well(s), Inter-connection with other system, Temporary use of a non-municipal water supply, Purchased water, Use of reclaimed water for non-potable purposes, etc.).
5	Stage 1 Triggers MILD Water Shortage Conditions
I	Requirements for initiation - The (name of your water supplier) will recognize that a mild water shortage condition exists when (describe triggering criteria, see examples below).
	Below are examples of the types of triggering criteria that might be used in a wholesale water supplier's drought contingency plan. The wholesale water supplier may devise other triggering

criteria and an appropriate number of stages tailored to its system; however, the plan must contain a minimum of three drought stages. One or a combination of such criteria may be defined for each drought response stage:

Example 1: Water in storage in the (name of reservoir) is equal to or less than (acre-feet and/or percentage of storage capacity).
Example 2: When the combined storage in the (name of reservoirs) is equal to or less than (acre-feet and/or percentage of storage capacity).
Example 3: Flows as measured by the U.S. Geological Survey gage on the (name of river) near, Texas reaches cubic feet per second (cfs).
Example 4: When total daily water demand equals or exceeds million gallons for consecutive days or million gallons on a single day.
Example 5: When total daily water demand equals or exceeds percent of the safe operating capacity of million gallons per day for consecutive days or percent on a single day.
Requirements for termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. The (name of water supplier) will notify its wholesale customers and the media of the termination of Stage 1.
Stage 2 Triggers MODERATE Water Shortage Conditions
Requirements for initiation – The (name of your water supplier) will recognize that a moderate water shortage condition exists when (describe triggering criteria).
Requirements for termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. Upon termination of Stage 2, Stage 1, or the applicable drought response stage based on the triggering criteria, becomes operative. The (name of your water supplier) will notify its wholesale customers and the media of the termination of Stage 2.
Stage 3 Triggers SEVERE Water Shortage Conditions
Requirements for initiation – The (name of your water supplier) will recognize that a severe water shortage condition exists when (describe triggering criteria; see examples in Stage 1).
<u>Requirements for termination</u> - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. Upon termination of Stage 3, Stage 2, or the applicable drought response stage based on the triggering criteria, becomes operative. The (name of your water supplier) will notify its wholesale customers and the media of the termination of Stage 3.
Stage 4 Triggers CRITICAL Water Shortage Conditions
Requirements for initiation - The (name of your water supplier) will recognize that an emergency water shortage condition exists when (describe triggering criteria; see examples below).
Example 1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
Example 2. Natural or man-made contamination of the water supply source(s).

Example 2.



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(b) The (designated official), or his/her designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries.
(c) The (designated official), or his/her designee(s), will further prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer.
(d) The (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.
Stage 3 Response SEVERE Water Shortage Conditions
<u>Target</u> : Achieve a percent reduction in (example: total water use, daily water demand, etc.).
Best Management Practices for Supply Management:
Describe additional measures, if any, to be implemented directly by (designated official), or his/her designee(s), to manage limited water supplies and/or reduce water demand. Examples include modifying reservoir operations procedures, interconnection with another water system, and use of reclaimed water for non-potable purposes.
Water Use Restrictions for Reducing Demand:
(a) The (designated official), or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (example: implement Stage 3 or appropriate stage of the customer's drought contingency plan).
(b) The (designated official), or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.
(c) The (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.
Stage 4 Response EMERGENCY Water Shortage Conditions
Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, the (designated official) shall:
 Assess the severity of the problem and identify the actions needed and time required to solve the problem.
2. Inform the utility director or other responsible official of each wholesale water customer

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assistance.

by telephone or in person and suggest actions, as appropriate, to alleviate problems

(example: notification of the public to reduce water use until service is restored).

3. If appropriate, notify city, county, and/or state emergency response officials for

- 4. Undertake necessary actions, including repairs and/or clean-up as needed.
- 5. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

Section IX: Pro Rata Curtailment

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 – Severe Water Shortage Conditions have been met, the _____ (*designated official*) is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

Section X: Contract Provisions

The _____ (name of your water supplier) will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

Section XI: Enforcement

During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay the following surcharges on excess water diversions and/or deliveries:

Example of surcharge:

times the normal water charge per acre-foot for water diversions and/or deliveries in excess of the monthly allocation from _____ percent through _____ percent above the monthly allocation.

Section XII: Variances

The _____ (designated official), or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the _____ (designated official) within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by the _____ (governing body), and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (c) Description of the relief requested.
- (d) Period of time for which the variance is sought.
- (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (f) Other pertinent information.

Variances granted by the _____ (governing body) shall be subject to the following conditions, unless waived or modified by the _____ (governing body) or its designee:
(a) Variances granted shall include a timetable for compliance.
(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.
Section XIII: Severability
It is hereby declared to be the intention of the _____ (governing body of your water supplier) that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the _____ (governing body of your water supplier) without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.







Paige Hamilton From:

Friday, March 22, 2019 1:34:30 PM Sent on:

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

CC: Sara Thornton <s

Subject: Nacogdoches Co. WRPERM 5585 - Response to RFI dated 2019.02.21 (2733-2)

Attachments: SRT to TCEQ, L. Beerman re Resp to RFI Nacogdoches Appl for Permit 5585

2019.03.22.pdf (1.21 MB)

Dr. Beerman,

Please find the attached correspondence, which is submitted pursuant to Nacogdoches County's application to amend Water Use Permit 5585. A hard copy is being put in the mail to you today. Do not hesitate to contact us if you have any questions.

Thanks,

Paige



PAIGE L. HAMILTON

Paralegal 512-322-5828 Direct Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Ave., Suite 1900, Austin, TX 78701

| 512-322-5800

News | vCard



****ATTENTION TO PUBLIC OFFICIALS AND OFFICIALS WITH OTHER INSTITUTIONS SUBJECT TO THE OPEN MEETINGS ACT ****

A "REPLY TO ALL" OF THIS EMAIL COULD LEAD TO VIOLATIONS OF THE TEXAS OPEN MEETINGS ACT. PLEASE REPLY ONLY TO LEGAL COUNSEL.

CONFIDENTIALITY NOTICE:

This email (and all attachments) is confidential legally privileged, and covered by the Flectronic



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VIA FIRST-CLASS MAIL

AND ELECTRONIC TRANSMISSION

www.lglawfirm.com

Ms. Thornton's Direct Line: (512) 322-5876

March 22, 2019

Dr. Lillian E. Beerman
Water Rights Permitting Team (MC 160)
Water Rights Permitting and Availability Section
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Nacogdoches County

WRPERM 5585; CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County (2733-2)

Dear Dr. Beerman:

This letter is submitted on behalf of my client, Nacogdoches County (the "County"), as a response to the Request for Information (the "RFI") that we received from the Texas Commission on Environmental Quality (the "TCEQ") dated February 21, 2019, in connection with the above-referenced application (the "Application").

Response to Request No. 1:

1. Provide a completed Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers, (TCEQ Form No. 20162) that complies with Title 30 Texas Administrative Code (TAC) § 288.5.

Please find enclosed as **Exhibit A** the memorandum prepared by Freese and Nichols that addresses this request. Included as <u>Attachment 1</u> to that exhibit is the TCEQ template for the *Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers*.

Response to Request No. 2:

2. Provide a completed Drought Contingency Plan for a Wholesale Public Water Supplier (TCEQ Form No. 20193) that complies with Title 30 TAC § 288.22.

Dr. Lillian E. Beerman March 22, 2019 Page 2

Please refer to the previously referenced **Exhibit A** for a response to this request. Included as <u>Attachment 1</u> to that exhibit is the TCEQ template for the *Drought Contingency Plan for a Wholesale Public Water Provider*.

On behalf of the County, we trust this information is useful and affirmatively addresses the matters included in the RFI. Please do not hesitate to contact me if you have any questions.

Sincerely,

Sara R. Thornton

SRT/plh 7813359 ENCLOSURES

cc:

The Honorable Greg Sowell

Mr. Keith Bradford Ms. Simone Kiel

Exhibit A

MEMORANDUM



Innovative approaches
Practical results
Outstanding service

4055 International Plaza, Suite 200 • Fort Worth, Texas 76109 • 817-735-7300 • fax 817-735-7492

www.freese.com

TO: Sara Thornton

CC: Jeremy Rice

FROM: Simone Kiel

SUBJECT: Response to TCEQ RFI on Application No. 5585A to Amend Water Use Permit No. 5585,

dated February 21, 2019

DATE: March 20, 2019

PROJECT: LGB14501

On February 21, 2019, the Texas Commission on Environmental Quality (TCEQ) issued a request for additional information associated with the water right Application No. 5585A for Nacogdoches County. Specifically, the TCEQ requested a completed *Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers* and a completed *Drought Contingency Plan for a Wholesale Public Water Provider*. Both documents are required of public wholesale water providers and are required as part of a new or amended water right application for new appropriations for wholesale water providers that provide 1,000 acre-feet or more of water supplies.

Currently, Nacogdoches County (or County) does not have a water right for diversions of 1,000 acre-feet per year or more. Since Nacogdoches County does not meet this requirement, the County is not required to develop a water conservation plan or drought contingency plan today. Should the TCEQ grant Nacogdoches County the water right amendment, Nacogdoches County will prepare the appropriate water conservation and drought contingency plans required for wholesale water providers that provide more than 1,000 acre-feet per year of water. The County will use the TCEQ templates as the basis of the required plans. Copies of the TCEQ templates for the *Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers* and the *Drought Contingency Plan for a Wholesale Public Water Provider* are included in Attachment 1. This requirement is also addressed in Section 4.5 of the Supporting Report that was submitted with the water right application.

As proffered in the TCEQ letter, we respectfully request the TCEQ to reassess the necessity of the requested data at this time.

Attachment 1
Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers and the Drought Contingency Plan for a Wholesale Public Water Provider Templates



Texas Commission on Environmental Quality

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

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

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

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

Contact Information

Name:	Click to add text	
Address:		
Telephone Number:	()	Fax: ()
Water Right No.(s):		
Regional Water Planning Group:		
Person responsible for implementing conservation program:		Phone: ()
Form Completed By:		
Title:		
Signature:		Date: / /

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

Α.	Pop	oulation and Service Area Data:					
	1.	Service area size (in square miles):					
		(Please attach a copy of service-area	a map)				
	2.	Current population of service area:					
	3.	Current population served for:					
		a. Water					
		b. Wastewater					
	4.	Population served for previous five years:	5.	. Projected popularin the following	ation for service area decades:		
		Year Population		Year	Population		
				2020			
				2030			
				2040			
				2050			
				2060			
	6.	List source or method for the calcul	lation of current a	nd projected popu	lation size.		
В.	Си	stomer Data					
		t (or attach) the names of all wholesale customers, amount of annual contract, and amount annual use for each customer for the previous year:					
		Cor Wholesale Customer	ntracted Amount (Acre-feet)	Previous Year Water Deliver			
					,		
				_			
				<u> </u>			

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A. Wate	er Delivery		
			acts is treated or raw water and the
amo	unts for the previou	is five years (in acre feet):	
	Year	Treated Water	Raw Water
	Totals		
а	cre-feet) for all wat		version(s) for the previous five years
а	cre-feet) for all wat	er uses:	version(s) for the previous five years
- -			
- -	cre-feet) for all wat Year Month	er uses:	
- -	cre-feet) for all wat	er uses:	
- -	cre-feet) for all wat Year Month January	er uses:	
-	rcre-feet) for all wat Year Month January February	er uses:	
-	Year Month January February March	er uses:	
- -	Year Month January February March April	er uses:	
- -	Year Month January February March April May	er uses:	
-	Year Month January February March April May June	er uses:	
-	Year Month January February March April May June July	er uses:	
-	Year Month January February March April May June July August	er uses:	
-	Year Month January February March April May June July August September	er uses:	

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	Totals				
2.	Wholesale population served and total amount of water diverted for municipal use for previous five years (in acre-feet):				
	Year	Total Population Served	Total Annual Water Diverted for Municipal Use		
		· -			
	-				
		-	-		
C. Pro	ojected Water Demai	nds			
			l water use, and economic growth in th tional water supply requirements from		
	R SUPPLY SYSTEM I Djected Water Deman				
A. Pro	R SUPPLY SYSTEM I	nds	ts authorized (in acre feet) with each.		
A. Pro	R SUPPLY SYSTEM I	nds	ts authorized (in acre feet) with each. Amount Authorized		
A. Pro	R SUPPLY SYSTEM In a specific state of the second state of the sec	nds upply sources and the amoun			
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A. Pro	R SUPPLY SYSTEM In a specific decision of the state of th	nds upply sources and the amoun			
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A. Pro	R SUPPLY SYSTEM In a specific decision of the system of th	nds upply sources and the amoun Source	Amount Authorized		
A. Pro	R SUPPLY SYSTEM In a specific decision of the system of th	nds upply sources and the amount Source ution System (if providing treatity of system (MGD):	Amount Authorized		
A. Pro Lis B. Tro 1.	R SUPPLY SYSTEM In piected Water Demand to all current water so water Type Surface Water Groundwater Other Patterner and Distributed to the company of the	nds upply sources and the amount Source ution System (if providing treatity of system (MGD):	Amount Authorized		

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3.	Please attach a description of the water system. Include the number of treatment plants,
	wells, and storage tanks

IV. WASTEWATER SYSTEM DATA

- A. Wastewater System Data (if applicable)
 - 1. Design capacity of wastewater treatment plant(s) (MGD):
 - 2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.
- B. Wastewater Data for Service Area (if applicable)
 - 1. Percent of water service area served by wastewater system:
 - 2. Monthly volume treated for previous five years (in 1,000 gallons):

Year			
Month			
January	 	 	
February	 	 	
March	 	 	
April	 	 	
May	 	 	
June			
July			
August	 	 	
September	 	 	
October	 	 	
November	 		
December	 		
Totals			

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and Official Adoption

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The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the	_ (name of water	supplier) is located	within the
(name of regional water planning as	rea or areas) and	(name	of water supplier) has
provided a copy of this water conser	vation plan to the	2 (nam	e of regional water
planning group or groups).			

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans:
- 3. A program for reuse and/or recycling of wastewater and/or graywater;
- 4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

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

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- 1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
- 2. evaluates conservation as an alternative to the proposed appropriation; and
- 3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

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

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Texas Commission on Environmental Quality

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

Drought Contingency Plan for a Wholesale Public Water Supplier

This form is provided as a model of a drought contingency plan for a wholesale public water supplier. If you need assistance in completing this form or in developing your plan, please contact the Conservation Staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Drought Contingency Plans must be formally adopted by the governing body of the water provider and documentation of adoption must be submitted with the plan. For example, adoption by a city council as an ordinance or by resolution of the entity's board of directors adopting the plan as administrative rules.

Name:	Click to add text
Address:	
Telephone Number:	() Fax: ()
Water Right No.(s):	
Regional Water Planning Group:	
Form Completed by:	
Title:	
Person responsible for implementation:	Phone: ()
Signature:	Date: / /
In order to conserve the available with particular regard for domestic public health, welfare, and safety a	ey, Purpose, and Intent water supply and/or to protect the integrity of water supply facilities water use, sanitation, and fire protection, and to protect and preserve and minimize the adverse impacts of water supply shortage or other
water supply emergency conditio Drought Contingency Plan (the Plan	ns, the (<i>name of your water supplier</i>) adopts the following n).
Section II: Public Involvement	t.
Plan was provided by (name inform the public and wholesale cus	olesale water customers to provide input into the preparation of the of your water supplier) by means of (describe methods used to stomers about the preparation of the plan and opportunities for input; ing public notice of a public meeting to accept input on the Plan).

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Section III:	Wholesale Water Customer Education
information al Plan is to be in This informaticustomers wit	me of your water supplier) will periodically provide wholesale water customers with bout the Plan, including information about the conditions under which each stage of the itiated or terminated and the drought response measures to be implemented in each stage. In will be provided by means of (example: describe methods to be used to provide the information about the Plan; for example, providing a copy of the Plan or periodically remation about the Plan with invoices for water sales).
Section IV:	Coordination with Regional Water Planning Groups
regional water	vice area of the (name of your water supplier) is located within the (name of planning area or areas) and the (name of your water supplier) has provided a copy the (name of your regional water planning group or groups).
Section V:	Authorization
designee, is he determination or his/he	signated official; for example, the general manager or executive director), or his/her ereby authorized and directed to implement the applicable provisions of this Plan upon that such implementation is necessary to protect public health, safety, and welfare. The er designee, shall have the authority to initiate or terminate drought or other water supply ponse measures as described in this Plan.
Section VI:	Application
your water su	s of this Plan shall apply to all customers utilizing water provided by the (<i>name of upplier</i>). The terms "person" and "customer" as used in the Plan include individuals, partnerships, associations, and all other legal entities.
Section VII:	Criteria for Initiation and Termination of Drought Response Stages
conditions on or termination	esignated official), or his/her designee, shall monitor water supply and/or demand a (example: weekly, monthly) basis and shall determine when conditions warrant initiation of each stage of the Plan. Customer notification of the initiation or termination of drought es will be made by mail or telephone. The news media will also be informed.
The triggering	criteria described below are based on:
 (provide a brie based on a sta	f description of the rationale for the triggering criteria; for example, triggering criteria are tistical analysis of the vulnerability of the water source under drought of record conditions).
Utilization of	alternative water sources and/or alternative delivery mechanisms:
(Examples: Of	ter source(s) for (name of utility) is/are: Ther well(s), Inter-connection with other system, Temporary use of a non-municipal water ased water, Use of reclaimed water for non-potable purposes, etc.).
Stage 1 Trigge	ers MILD Water Shortage Conditions
	for initiation - The (name of your water supplier) will recognize that a mild water ition exists when (describe triggering criteria, see examples below).

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Below are examples of the types of triggering criteria that might be used in a wholesale water supplier's drought contingency plan. The wholesale water supplier may devise other triggering

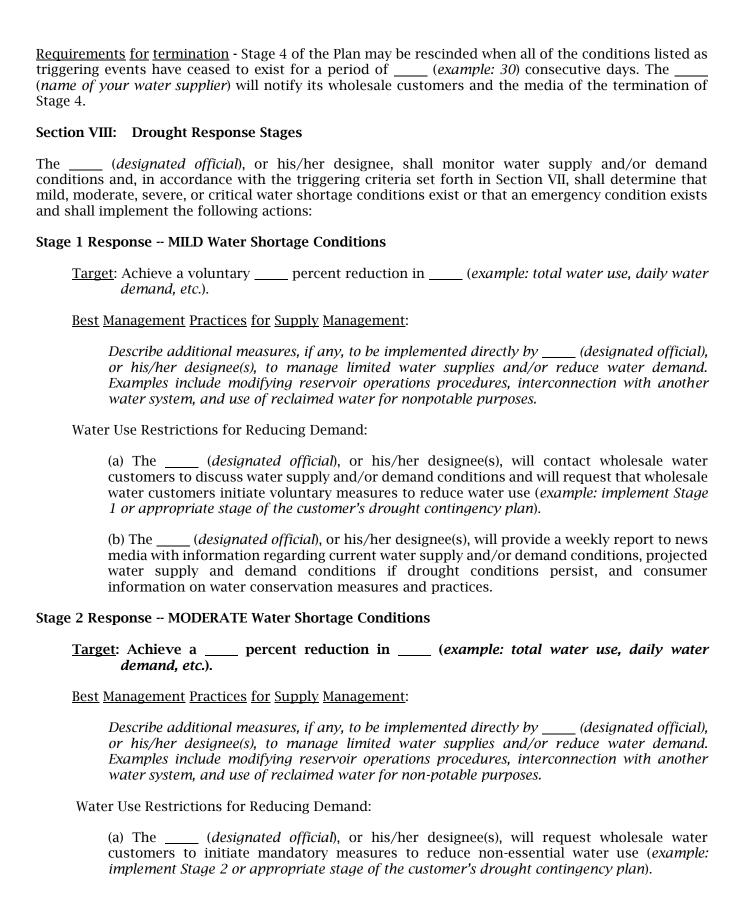
criteria and an appropriate number of stages tailored to its system; however, the plan must contain a minimum of three drought stages. One or a combination of such criteria may be defined for each drought response stage:

Example 1: Water in storage in the (name of reservoir) is equal to or less than (acre-feet and/or percentage of storage capacity).
Example 2: When the combined storage in the (name of reservoirs) is equal to or less than (acre-feet and/or percentage of storage capacity).
Example 3: Flows as measured by the U.S. Geological Survey gage on the (name of river) near, Texas reaches cubic feet per second (cfs).
Example 4: When total daily water demand equals or exceeds million gallons for consecutive days or million gallons on a single day.
Example 5: When total daily water demand equals or exceeds percent of the safe operating capacity of million gallons per day for consecutive days or percent on a single day.
Requirements for termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. The (name of water supplier) will notify its wholesale customers and the media of the termination of Stage 1.
Stage 2 Triggers MODERATE Water Shortage Conditions
Requirements for initiation - The (name of your water supplier) will recognize that a moderate water shortage condition exists when (describe triggering criteria).
Requirements for termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. Upon termination of Stage 2, Stage 1, or the applicable drought response stage based on the triggering criteria, becomes operative. The (name of your water supplier) will notify its wholesale customers and the media of the termination of Stage 2.
Stage 3 Triggers SEVERE Water Shortage Conditions
Requirements for initiation - The (name of your water supplier) will recognize that a severe water shortage condition exists when (describe triggering criteria; see examples in Stage 1).
Requirements for termination - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of (example: 30) consecutive days. Upon termination of Stage 3, Stage 2, or the applicable drought response stage based on the triggering criteria, becomes operative. The (name of your water supplier) will notify its wholesale customers and the media of the termination of Stage 3.
Stage 4 Triggers CRITICAL Water Shortage Conditions
Requirements for initiation - The (name of your water supplier) will recognize that an emergency water shortage condition exists when (describe triggering criteria; see examples below).
Example 1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or

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Natural or man-made contamination of the water supply source(s).

Example 2.



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	(b) The (<i>designated official</i>), or his/her designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries.
	(c) The (<i>designated official</i>), or his/her designee(s), will further prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer.
	(d) The (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.
Stage 3 Re	sponse SEVERE Water Shortage Conditions
<u>Targ</u>	et: Achieve a percent reduction in (example: total water use, daily water demand, etc.).
<u>Best</u>	Management Practices for Supply Management:
	Describe additional measures, if any, to be implemented directly by (designated official), or his/her designee(s), to manage limited water supplies and/or reduce water demand. Examples include modifying reservoir operations procedures, interconnection with another water system, and use of reclaimed water for non-potable purposes.
Wate	r Use Restrictions for Reducing Demand:
	(a) The (designated official), or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (example: implement Stage 3 or appropriate stage of the customer's drought contingency plan).
	(b) The (<i>designated official</i>), or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.
	(c) The (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.
Stage 4 Re	esponse EMERGENCY Water Shortage Conditions

S

Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, the _____ (designated official) shall:

- Assess the severity of the problem and identify the actions needed and time required to solve the problem.
- Inform the utility director or other responsible official of each wholesale water customer by telephone or in person and suggest actions, as appropriate, to alleviate problems (example: notification of the public to reduce water use until service is restored).
- If appropriate, notify city, county, and/or state emergency response officials for assistance.

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- 4. Undertake necessary actions, including repairs and/or clean-up as needed.
- 5. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

Section IX: Pro Rata Curtailment

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 – Severe Water Shortage Conditions have been met, the _____ (*designated official*) is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

Section X: Contract Provisions

The _____ (name of your water supplier) will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

Section XI: Enforcement

During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay the following surcharges on excess water diversions and/or deliveries:

Example of surcharge:

 times the normal water	charge per acre-foo	ot for water diversions	and/or deliveries in
excess of the monthly	allocation from	_ percent through	percent above the
monthly allocation.			

Section XII: Variances

The _____ (designated official), or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the _____ (*designated official*) within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by the _____ (*governing body*), and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (c) Description of the relief requested.
- (d) Period of time for which the variance is sought.
- (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (f) Other pertinent information.

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Variances granted by the (<i>governing body</i>) shall be subject to the following conditions, unleading waived or modified by the (<i>governing body</i>) or its designee:	ess
(a) Variances granted shall include a timetable for compliance.(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has fail to meet specified requirements.	led

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section XIII: Severability

It is hereby declared to be the intention of the _____ (governing body of your water supplier) that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the _____ (governing body of your water supplier) without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 21, 2019

Sara R. Thornton, J.D. Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Avenue, Suite 1900 Austin, Texas 78701 **CERTIFIED MAIL**

RE: Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Ms. Thornton:

This acknowledges receipt, on November 14, 2016, of additional information and fees in the amount of \$2,689.63 (Receipt Nos. M7075454A & M707545B, copies enclosed).

Before we can continue to process the referenced application:

- 1. Provide a completed *Utility Profile and Water Conservation Plan Requirements for Municipal Use by Wholesale Public Suppliers*, (TCEQ Form No. 20162) that complies with Title 30 Texas Administrative Code (TAC) § 288.5.
- 2. Provide a completed *Drought Contingency Plan for a Wholesale Public Water Supplier* (TCEQ Form No. 20193) that complies with Title 30 TAC § 288.22.

Please provide the requested information by March 25, 2019 or the application may be returned pursuant to Title 30 TAC § 281.19. Alternatively, you may have the question of the necessity of the requested data (or the sufficiency of the information already submitted) referred to the commission for a decision. To be considered, a request for a referral must be provided by March 25, 2019.

If you have questions concerning this application, please contact me at P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • www.tceq.state.tx.us

Nacogdoches County Application No. 5585A February 21, 2019 Page 2 of 2

lillian.beerman@tceq.texas.gov or by phone at (512) 239-4019.

Sincerely,

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

Enclosures

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION TELEPHONE MEMO TO THE FILE

Please complete with typewriter or black pen.

Call to: Sara R. Thornton Call from: Lillian E. Beerman
Date of call: Feb 21, 2019 File no.: WRPERM 5585A
Phone no.: (Subject: <u>Macagdoches County</u>
Technical RFI
Information for file: Brad Castlebury left Lloyd Gossling Sara Thornton has taken his
Sara Thornton has taken his
Case load.
I told her that I would
remail how Macogdoches Courty 5585 A
Consorvatia PFI.
And soud how the email.
Signed of Wian E. Weering That
7 .

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 21, 2019

Sara R. Thornton, J.D. Lloyd Gosselink Rochelle & Townsend, P.C. 816 Congress Avenue, Suite 1900 Austin, Texas 78701

CERTIFIED MAIL

9489 0090 0027 6002 6765 91

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Nacogdoches County Application No. 5585A February 21, 2019 Page 2 of 2

If you have questions concerning this application, please contact me at lillian.beerman@tceq.texas.gov or by phone at (512) 239-4019.

Sincerely,

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

Water Rights Permitting Team

Water Rights Permitting and Availability Section

Enclosures

TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

	Tran Date	18-NOV-16						18-NOV-16			
	Slip Key Document#	BS00053525	D7801445					BS00053525 18-NOV-16	D7801445		
Z CC Type	Tran Code		N	CK					N	G.	
Check Number CC Type	Card Auth. User Data	32186	111516	SPREDEAU				2332	111516	SPREDEAU	
Ref#1	Ref#2 Paid In By	M707545A	5585	LLOYD	GOSSELINK	ROCHELLE &	TOWNSEND PC	M707546	23420	MAYERS JR,	PABLO/PATRI
Fee Code	Account Name	WUP	WUP	WATER USE PERMITS				WUP	WUP	WATER USE PERMITS	
	Fee Description	WTR USE PERMITS						**			

Tran Amount

-\$2,475.75

-\$42,848.56	
Grand Total:	

-\$2,575.75

Total (Fee Code):

CIA F

-\$100.00

Page 11 of 11

WATER AVAILABILITY DIV.

2016 NOV 21 A 11: 23

BECEINED

WATER AVAILABILITY DIV.

2016 NOV 21 A 11:23

BECEINED



TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

	Tran Amount	4	-\$2T3.88			•	
	Tran Date	18-NOV-16					
Slip Key	Document#	BS00053525	D7801445				
Card Auth. Tran Code	Rec Code		N	CK			
240946 3404 1	100	32186	111516	SPREDEAU			
Ref#1 Ref#2	Faid in By	M707545B	5585	LLOYD	GOSSELINK	ROCHELLE &	TOWNSEND PC
Fee Code Account#		Prgu	PIGU	NOTICE FEES WUP WATER USE	PERMITS		
Fee Description	A CALL	WATER USE PERM					

Total (Fee Code):

-\$213.88



Texas Commission on Environmental Quality

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

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

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

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

Contact Information

Name:	Click to add text	
Address:		
Telephone Number:	()	Fax: ()
Water Right No.(s):		
Regional Water Planning Group:		
Person responsible for implementing conservation program:		Phone: ()
Form Completed By:		
Title:		
Signature:		Date: / /

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A.

В.

Po	pulation and Service Area Data:			
1.	Service area size (in square mile	es):		
	(Please attach a copy of service-	area map)		
2.	Current population of service a	rea:		
3.	Current population served for:			
	a. Water			
	b. Wastewater			
4.	Population served for previous tyears:	five 5.	Projected populat in the following d	ion for service area ecades:
	Year Population	1	Year	Population
			2020	
			2030	
			2040	
			2050	
			2060	
6.	List source or method for the ca	dculation of current an	d projected popula	ation size.
$C\iota$	ustomer Data			
	st (or attach) the names of all who nual use for each customer for th		unt of annual cont	ract, and amount of
	Wholesale Customer	Contracted Amount (Acre-feet)		ar Amount of red (acre-feet)

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WATER I	USE DATA FOR SERV	ICE AREA	
	r Delivery	-02 - 2 - 2 - 2	
Indica	ate if the water provid	led under wholesale contract ïve years (in acre feet):	s is treated or raw water and the
	<u>Year</u>	Treated Water	Raw Water
			·
	Totals		
D Mata			
B. Water	r Accounting Data		
1. To	-	diverted at the point of divers	sion(s) for the previous five year
1. To	otal amount of water cre-feet) for all water	diverted at the point of divers uses:	
1. To	otal amount of water cre-feet) for all water	uses:	
1. To	otal amount of water cre-feet) for all water to water the second of the	uses:	
1. To	otal amount of water cre-feet) for all water to the second	uses:	
1. To	otal amount of water cre-feet) for all water of the second	uses:	
1. To	otal amount of water cre-feet) for all water of the second	uses:	
1. To	otal amount of water cre-feet) for all water of the second	uses:	
1. To	otal amount of water cre-feet) for all water of the second	uses:	
1. To	otal amount of water cre-feet) for all water of the second	uses:	
1. To	Year Month January February March April May June	uses:	
1. To	Year Year Month January February March April May June July	uses:	
1. To	Year Year Month January February March April May June July August	uses:	
1. To	Year Month January February March April May June July August September	uses:	

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Totals

WATER A. Proj List	information such as popularities area over the next such growth. R SUPPLY SYSTEM DATA jected Water Demands all current water supply Water Type Surface Water	alation trends, historic t ten years and any ad	demands for the next ten years using ical water use, and economic growth in the dditional water supply requirements from unts authorized (in acre feet) with each. Amount Authorized
WATER A. Proj List	If applicable, project and information such as population such as population such as population and such growth. R SUPPLY SYSTEM DATA jected Water Demands all current water supply Water Type Surface Water	ulation trends, historic t ten years and any ad sources and the amou	ical water use, and economic growth in the dditional water supply requirements from unts authorized (in acre feet) with each.
WATER A. Proj List	If applicable, project and information such as population such as population such as population and such growth. R SUPPLY SYSTEM DATA jected Water Demands all current water supply Water Type Surface Water	ulation trends, historic t ten years and any ad sources and the amou	ical water use, and economic growth in the dditional water supply requirements from unts authorized (in acre feet) with each.
WATER A. Proj List	information such as popularities area over the next such growth. R SUPPLY SYSTEM DATA jected Water Demands all current water supply Water Type Surface Water	ulation trends, historic t ten years and any ad sources and the amou	ical water use, and economic growth in the dditional water supply requirements from unts authorized (in acre feet) with each.
A. Proj List	jected Water Demands all current water supply Water Type Surface Water	sources and the amou	
List B. Tree	all current water supply Water Type Surface Water		
B. Tred	Water Type Surface Water		
	Surface Water	Source	Amount Authorized
	Groundwater		
	Other		
1.	atment and Distribution S	System (if providing tre	reated water)
	Design daily capacity of s	system (MGD):	
2.	Storage capacity (MGD):		
	a. Elevated		
1	b. Ground		
3.	D. GIOUIIU		

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IV. WASTEWATER SYSTEM DATA

- A. Wastewater System Data (if applicable)
 - 1. Design capacity of wastewater treatment plant(s) (MGD):
 - 2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.
- B. Wastewater Data for Service Area (if applicable)
 - 1. Percent of water service area served by wastewater system:
 - 2. Monthly volume treated for previous five years (in 1,000 gallons):

Year			
Month			
January	 	 	
February	 	 	
March	 	 	
April		 	
May		 	
June			
July		 	
August			
September		 	
October	 		
November		 	
December	 	 	
Totals			

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Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and Official Adoption

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The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the ______ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

- 1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
- 2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
- 3. A program for reuse and/or recycling of wastewater and/or graywater;
- 4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

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

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

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- 2. evaluates conservation as an alternative to the proposed appropriation; and
- 3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

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

TCEQ-20162 (Rev. 12/2018) Page 8 of 8



Texas Commission on Environmental Quality

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

Drought Contingency Plan for a Wholesale Public Water Supplier

This form is provided as a model of a drought contingency plan for a wholesale public water supplier. If you need assistance in completing this form or in developing your plan, please contact the Conservation Staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Drought Contingency Plans must be formally adopted by the governing body of the water provider and documentation of adoption must be submitted with the plan. For example, adoption by a city council as an ordinance or by resolution of the entity's board of directors adopting the plan as administrative rules.

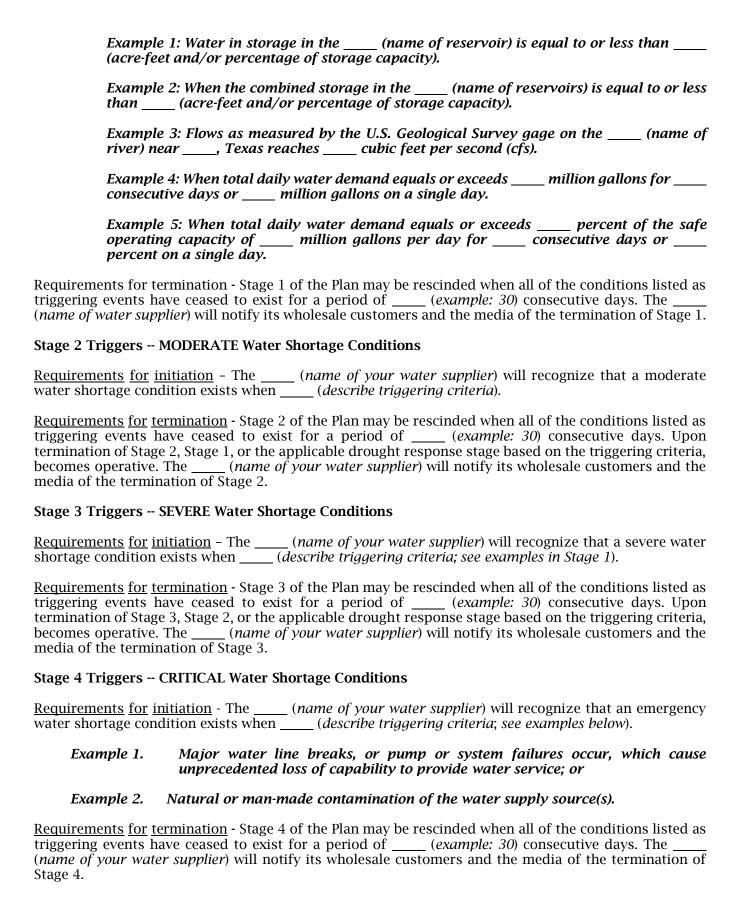
Name:	Click to add text				
Address:					
Telephone Number:	() Fax: ()				
Water Right No.(s):					
Regional Water Planning Group:					
Form Completed by:					
Title:					
Person responsible for implementation:	Phone: ()				
Signature:	Date: / /				
Section I: Declaration of Policy, Purpose, and Intent In order to conserve the available water supply and/or to protect the integrity of water supply facilities with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the (name of your water supplier) adopts the following Drought Contingency Plan (the Plan). Section II: Public Involvement					
Plan was provided by (name inform the public and wholesale cus	olesale water customers to provide input into the preparation of the of your water supplier) by means of (describe methods used to tomers about the preparation of the plan and opportunities for input; ng public notice of a public meeting to accept input on the Plan).				

TCEQ-20193 (Rev. 12/2018) Page 1 of 7

Section III: **Wholesale Water Customer Education** (name of your water supplier) will periodically provide wholesale water customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of _____ (example: describe methods to be used to provide customers with information about the Plan; for example, providing a copy of the Plan or periodically including information about the Plan with invoices for water sales). Section IV: Coordination with Regional Water Planning Groups The water service area of the (name of your water supplier) is located within the (name of regional water planning area or areas) and the _____ (name of your water supplier) has provided a copy of the Plan to the _____ (name of your regional water planning group or groups). **Section V:** Authorization __ (designated official; for example, the general manager or executive director), or his/her designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan. Section VI: **Application** The provisions of this Plan shall apply to all customers utilizing water provided by the your water supplier). The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities. Section VII: Criteria for Initiation and Termination of Drought Response Stages __ (designated official), or his/her designee, shall monitor water supply and/or demand conditions on a (example: weekly, monthly) basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by mail or telephone. The news media will also be informed. The triggering criteria described below are based on: (provide a brief description of the rationale for the triggering criteria; for example, triggering criteria are based on a statistical analysis of the vulnerability of the water source under drought of record conditions). Utilization of alternative water sources and/or alternative delivery mechanisms: Alternative water source(s) for _____ (name of utility) is/are: _ (Examples: Other well(s), Inter-connection with other system, Temporary use of a non-municipal water supply, Purchased water, Use of reclaimed water for non-potable purposes, etc.). Stage 1 Triggers -- MILD Water Shortage Conditions Requirements for initiation – The _____ (name of your water supplier) will recognize that a mild water shortage condition exists when _____ (describe triggering criteria, see examples below). Below are examples of the types of triggering criteria that might be used in a wholesale water

criteria and an appropriate number of stages tailored to its system; however, the plan must contain a minimum of three drought stages. One or a combination of such criteria may be defined for each drought response stage:

supplier's drought contingency plan. The wholesale water supplier may devise other triggering



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Section VIII: Drought Response Stages (designated official), or his/her designee, shall monitor water supply and/or demand conditions and, in accordance with the triggering criteria set forth in Section VII, shall determine that mild, moderate, severe, or critical water shortage conditions exist or that an emergency condition exists and shall implement the following actions: **Stage 1 Response -- MILD Water Shortage Conditions** <u>Target</u>: Achieve a voluntary _____ percent reduction in _____ (example: total water use, daily water demand, etc.). **Best Management Practices for Supply Management:** Describe additional measures, if any, to be implemented directly by _____ (designated official), or his/her designee(s), to manage limited water supplies and/or reduce water demand. Examples include modifying reservoir operations procedures, interconnection with another water system, and use of reclaimed water for nonpotable purposes. Water Use Restrictions for Reducing Demand: (a) The _____ (designated official), or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate voluntary measures to reduce water use (example: implement Stage 1 or appropriate stage of the customer's drought contingency plan). (b) The _____ (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices. **Stage 2 Response -- MODERATE Water Shortage Conditions** Target: Achieve a ____ percent reduction in ____ (example: total water use, daily water demand. etc.). Best Management Practices for Supply Management: Describe additional measures, if any, to be implemented directly by _____ (designated official), or his/her designee(s), to manage limited water supplies and/or reduce water demand. Examples include modifying reservoir operations procedures, interconnection with another water system, and use of reclaimed water for non-potable purposes. Water Use Restrictions for Reducing Demand: (a) The (designated official), or his/her designee(s), will request wholesale water customers to initiate mandatory measures to reduce non-essential water use (example: implement Stage 2 or appropriate stage of the customer's drought contingency plan). _ (designated official), or his/her designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries. (c) The (designated official), or his/her designee(s), will further prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a

TCEQ-20193 (Rev. 12/2018) Page 4 of 7

monthly water usage allocation baseline for each wholesale customer.

(d) The ____ (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.
 Stage 3 Response -- SEVERE Water Shortage Conditions
 Target: Achieve a ____ percent reduction in ____ (example: total water use, daily water

Best Management Practices for Supply Management:

demand, etc.).

Describe additional measures, if any, to be implemented directly by _____ (designated official), or his/her designee(s), to manage limited water supplies and/or reduce water demand. Examples include modifying reservoir operations procedures, interconnection with another water system, and use of reclaimed water for non-potable purposes.

Water Use Restrictions for Reducing Demand:

- (a) The _____ (designated official), or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (example: implement Stage 3 or appropriate stage of the customer's drought contingency plan).
- (b) The _____ (*designated official*), or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.
- (c) The _____ (designated official), or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Stage 4 Response -- EMERGENCY Water Shortage Conditions

Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, the _____ (designated official) shall:

- 1. Assess the severity of the problem and identify the actions needed and time required to solve the problem.
- 2. Inform the utility director or other responsible official of each wholesale water customer by telephone or in person and suggest actions, as appropriate, to alleviate problems (example: notification of the public to reduce water use until service is restored).
- 3. If appropriate, notify city, county, and/or state emergency response officials for assistance.
- 4. Undertake necessary actions, including repairs and/or clean-up as needed.
- 5. Prepare a post-event assessment report on the incident and critique of emergency response procedures and actions.

Section IX: Pro Rata Curtailment

TCEQ-20193 (Rev. 12/2018) Page 5 of 7

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 - Severe Water Shortage Conditions have been met, the _____ (*designated official*) is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039. **Contract Provisions** Section X: _(name of your water supplier) will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039. **Section XI: Enforcement** Example of surcharge: During any period when either mandatory water use restrictions or pro rata allocation of available water supplies are in effect, wholesale customers shall pay the following surcharges on excess water diversions and/or deliveries: times the normal water charge per acre-foot for water diversions and/or deliveries in excess of the monthly allocation from _____ percent through _____ percent above the monthly allocation. Examples of fines and/or discontinuation of service: Mandatory water use restrictions or pro rata allocation of available water supplies may be imposed during drought stages and emergency water management actions. These water use restrictions will be enforced by warnings and penalties as follows: On the first violation, customers will be notified by written notice that they have violated the mandatory water use restriction. If the first violation has not been corrected after ten (10) days from the written notice, (name of your water supplier) may assess a fine up to \$ per violation. (name of your water supplier) may install a flow restricting device in the line to limit the amount of water which will pass through the meter in a 24-hour period. The utility may charge the customer for the actual cost of installing and removing the flow restricting device, not to exceed fifty dollars (\$50.00); (name of your water supplier) maintains the right, at any violation or action level, to disconnect irrigation systems and/or suspend water services to a customer for public safety issues with reconnection fees and possible citations. Subsequent violations of the plan shall result in increased fines or upon the occurrence of violations, after notice, the discontinuation of services. Services discontinued under this provision shall be restored only upon payment of a reconnection fee and any other costs incurred by the utility in discontinuing service. Section XII: Variances __ (designated official), or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

(b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

(a) Compliance with this Plan cannot be technically accomplished during the duration of the water

supply shortage or other condition for which the Plan is in effect.

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Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the (<i>designated official</i>) within 5 days after pro rata allocation has been invoked. All petitions for
variances shall be reviewed by the (<i>governing body</i>), and shall include the following:
(a) Name and address of the petitioner(s).(b) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
 (c) Description of the relief requested. (d) Period of time for which the variance is sought. (e) Alternative measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date. (f) Other pertinent information.
Variances granted by the (<i>governing body</i>) shall be subject to the following conditions, unless waived or modified by the (<i>governing body</i>) or its designee:
(a) Variances granted shall include a timetable for compliance.(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.
Cootion VIII. Consultility

Section XIII: Severability

It is hereby declared to be the intention of the _____ (governing body of your water supplier) that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the _____ (governing body of your water supplier) without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

TCEQ-20193 (Rev. 12/2018) Page 7 of 7







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

Sent on: Thursday, February 21, 2019 8:10:05 PM

To:

Subject: Nacogdoches County WRPERM No. 5585A Request For Information

Attachments: Nagogdoches 5585A Tech Rev Cons RFI 2.21.2019.pdf (1.02 MB)

Ms. Thornton,

Nacogdoches County, WRPERM Application No. 5585A is currently in Technical Review. The water rights Conservation staff requests that you provide additional information in order that they may complete their review of the application.

I have attached the Request for Information. A hard copy of the letter has been sent via US Mail. Please submit the completed Utility Profile, Conservation Plan, and Drought Continency Plan by Monday, March 25, 2019.

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

Thank you,

Lillian E. Beerman, Ph. D., M. F.S.

Project Manager, Water Rights Permitting

Water Availability Division MC-160

Texas Commission on Environmental Quality

12100 Park 35 Circle, Bldg. F, 3rd Floor

Austin, Texas 78753

lillian.beerman@tceq.texas.gov

2: (512) 239-4019



TCEQ Interoffice Memorandum

TO: Office of the Chief Clerk Texas Commission on Environmental Quality THRU: Chris Kozlowski Work Leader FROM: Lillian E. Beerman, Ph.D., Project Manager Water Rights Permitting Team DATE: April 25, 2017 SUBJECT: Nacogdoches County WRPERM 5585 CN601098536, RN103924049 Application No. 5585A to Amend Water Use Permit No. 5585 Texas Water Code § 11.122, Full Basin Mailed and Published Notice Naconiche Creek, Neches River Basin Nacogdoches County The application and fees were received on January 20, 2016. Additional fees and information were received on November 15, 2016. The application was declared administratively complete and accepted for filing with the Office of the Chief Clerk on April 25, 2017. Full-basin mailed and published notice is required pursuant to Title 30 Texas Administrative Code § 295.158(b)(2). Nacogdoches County seeks to amend Water Use Permit No. 5585 to authorize the diversion and use of not to exceed 4,750 acre-feet of water per year from the perimeter of Lake Naconiche, Neches River Basin for municipal, industrial, and agricultural purposes in Nacogdoches County. Applicant also seeks to amend Special Condition 4(D) of the Permit, replacing the existing instream flow requirement with SB3-based environmental flow criteria. Required fees have been paid and the application is sufficient for filing. Acceptable Province Team Lillian E. Beerman, PhD, Project Manager Water Rights Permitting Team Water Availability Division							
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Lillian E. Beerman, PhD, Project Manager Water Rights Permitting Team Water Availability Division		diversion and of Lake Naco purposes in N 4(D) of the Pe	d use of not to exceed 4,750 act niche, Neches River Basin for m Nacogdoches County. Applican ermit, replacing the existing ins	re-feet of water nunicipal, indus it also seeks to	per year from th strial, and agricult amend Special Co	e perii tural onditio	on
Lillian E. Beerman, PhD, Project Manager Water Rights Permitting Team Water Availability Division		Required fees	s have been paid and the applic	ation is sufficie	ent for filing.		
OCC Mailed Notice Required □YES □NO	C	Lillian E. Beer Water Rights	man, PhD, Project Manager Permitting Team		· .		
			OCC Mailed Notice Required	₽YES	□no		

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 25, 2017

Mr. Brad B. Castleberry Lloyd Gosselink 816 Congress Avenue, Suite 1900 Austin, TX 78701

RE: Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Mr. Castleberry:

This acknowledges the receipt on November 15, 2016 of additional information and fees in the amount of \$2,689.63 (Receipt Nos. M707545A and M707545B, copies enclosed). This application was declared administratively complete and filed with the Office of the Chief Clerk on April 25, 2017. Staff will continue processing the application for consideration by the Executive Director.

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

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

Sincerely,

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

Wian E. Been

Water Rights Permitting Team

Water Rights Permitting and Availability Section

Enclosures

TCEQ 18-NOV-16 10:07 AM

Fee Description

WTR USE PERMITS

Fee Code Account#

WUP WUP

WUP WUP

Account Name

WATER USE PERMITS

WATER USE PERMITS

TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

	23	DIV.
E	≐	1
	4	ABIL
M	21	7
C	ZOIL NOV	AVA S
Œ	2016	WATER AVAILABILITY

Ref#1	Check Number	r CC Type			
Ref#2 Paid In By	Card Auth. User Data	Tran Code	Slip Key Document#	Tran Date	Tran Amount
M707545A 5585 LLOYD GOSSELINK	32186 111516 SPREDEAU	N CK	BS00053525 D7801445	18-NOV-16	-\$2,475.75
ROCHELLE & TOWNSEND PC M707546 23420 MAYERS JR, PABLO/PATRI	2332 111516 SPREDEAU	N CK	BS00053525 D7801445	18-NOV-16	-\$100.00
CIA F		Total	(Fee Code):		-\$2,575.75
		Grand Total	l:		-\$42,848.56

Page 11 of 11



TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

Fee Description NOTICE FEES-WUP- WATER USE PERM	Fee Code Account# Account Name PTGU PTGU NOTICE FEES WUP WATER USE PERMITS	Ref#1 Ref#2 Paid In By M707545B 5585 LLOYD GOSSELINK ROCHELLE & TOWNSEND PC	Check Number Card Auth. User Data 32186 111516 SPREDEAU	CC Type Tran Code Rec Code N CK	Slip Key Document# BS00053525 D7801445	Tran Date	Tran Amount
				Total	(Fee Code):		-\$213.88

RECEIVED
2016 NOV 21 A 11: 23
WATER AVAILABILITY DIV.

Page 7 of 11

816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

Mr. Castleberry's Direct Line: (512) 322-5856

November 14, 2016

Ms. Olivia Ybarra
Project Manager
Water Rights Permitting Team (MC 160)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78753-3087

VIA ELECTRONIC TRANSMISSION
AND FIRST-CLASS MAIL

Re: Res

Response to Request for Information Dated October 13, 2016
Nacogdoches County; WRPERM 5585; CN601098536; RN103924049
Application No. 5585A to amend Water Use Permit No. 5585
Texas Water Code § 11.122, Full Basin Mailed and Published Notice
Naconiche Creek, Neches River Basin, Nacogdoches County (2733-2)

Dear Ms. Ybarra:

This letter is submitted on behalf of Nacogdoches County (the "Applicant") in response to a Request for Information ("RFI") received from the Texas Commission on Environmental Quality dated October 13, 2016 in connection with the above-referenced application (the "Application").

Response to Request No. 1:

Confirm that the application requests to change the instream flow requirement for the existing authorization in Water Use Permii 5855. Section XII on Page 4 of the supplement to the application indicates that the existing special conditions were replaced with "SB3 flow requirements," and the application modeling report discusses an analysis done with both the currently permitted flow restrictions and "SB3-Based Environmental Flow Criteria." However there is not a specific request to amend the existing instream flow requirement stated in the application.

The Applicant requests to amend the existing instream flow requirements to SB3 requirements. Please see Sections 1.2 and 2.2 of the Supplement to Application for Water Right Amendment for Diversion from Lake Naconiche ("Supplemental Report"), dated October 2015, reflecting the transition to SB3 flow requirements and attached hereto as Attachment A.

Ms. Olivia Ybarra November 14, 2016 Page 2

Response to Request No. 2:

Provide electronic copies of all modeling files used in the WAM analysis discussed in the application.

The WAM analysis discussed in the Supplemental Report is being provided electronically, attached hereto as Attachment B:

<u>FNI Base Model</u> – This model includes all the Base WAM changes shown in Appendix B of the Supplemental Report without the proposed diversion to compare the impact on water rights.

FY Current Environmental Flow Criteria – This is the model used to calculate the yield of 3,160 acre-feet per year in Table 2-4 of the Supplemental Report.

SB3-Based Environmental Flow – This model includes the SB3 criteria at Lake Naconiche with the proposed diversion. It is the model used to calculate the yield of 4,750 acre-feet per year in Table 2-4 of the Supplemental Report.

Response to Request No. 3:

Confirm the drainage area above the diversion point. Commission records indicate that the drainage area above the dam is 28.07 square miles.

The drainage area of 27.27 square miles as reported in the water right application is the drainage area cited in the Natural Resource Conservation Service structural data and the TCEQ Dam Database. The drainage area used in TCEQ WAM is 28.07 square miles. The Applicant acknowledges the drainage area for this Application is 28.07 square miles.

Response to Request No. 4:

Provide applicable water conservation plans and drought contingency plans for municipal, industrial, and agricultural uses that comply with Title 30 Texas Administrative Code (TAC) Chapter 288.

The Applicant is not currently using the water for municipal, industrial and agricultural purposes. However, 180 days prior to using the water for such purposes, the Applicant will provide the required water conservation plan or drought contingency plan in accordance with the requirements of Texas Water Code §11.002 and Title 30 of the Texas Administrative Code, Chapter 288.

Ms. Olivia Ybarra November 14, 2016 Page 3

Response to Request No. 5:

Remit fees in the amount of \$4,963.38. Please make checks payable to the TCEQ or Texas Commission on Environmental Quality.

Filing Fees (amendment)	\$ 100.00
Recording Fees (\$1.25 x 1 page)	\$ 1.25
Use Fees (\$1.00 x 4,750 acre-feet)	\$ 4,750.00
Notice Fees (Neches Basin)	\$ 213.88
TOTAL FEES	\$ 5,064.63
FEES RECEIVED	\$ 101.25
TOTAL FEES DUE	\$ 4,963.38
Fees Due Prior to Administratively Complete	\$ 2,689.63
Fees Due 180 Days After Issuance	\$ 2,375.00

Enclosed please find our firm's check in the amount of \$2,689.63 for fees due prior to the Application being declared administratively complete.

Should you have any questions, please do not hesitate to contact me or Ashleigh K. Acevedo (512) 322-5891 at your convenience. We look forward to working with you and your staff on this important matter.

Brad B. Castleberry u/p ashign a

BBC\ldp 7210876.6 **ENCLOSURES**

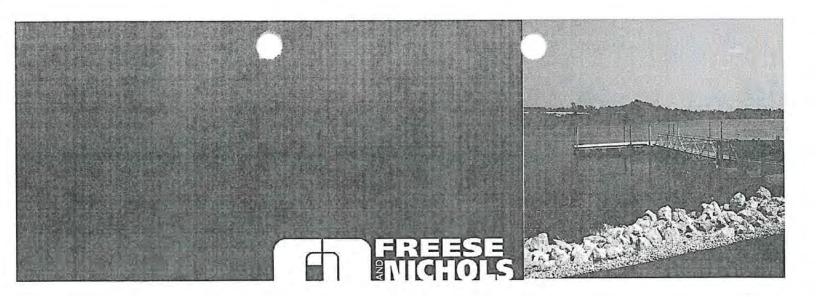
cc:

The Honorable Mike Perry

Mr. Keith Bradford Ms. Simone Kiel

Ms. Ashleigh K. Acevedo

Attachment A Supplemental Report



SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE

Prepared for:

County of Nacogdoches

October 2015

Prepared by:

FREESE AND NICHOLS, INC. 4055 International Plaza, Suite 200 Fort Worth, Texas 76109 817-735-7300

SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE

SIMONE FREY KIEL

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Mare Jrey Keel

FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144

Jereny Rice, Hydrologist

Prepared by:

FREESE AND NICHOLS, INC. 4055 International Plaza, Suite 200 Fort Worth, Texas 76109 817-735-7300

LGB14501



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1.0 DESCRIPTION OF THE PROJECT

1.1 LAKE NACONICHE DESCRIPTION

Lake Naconiche is located in northeast Nacogdoches County and is authorized under Permit/Application 5585 to impound 9,072 acre-feet at elevation 348 feet msl for flood control and recreational purposes¹. Lake Naconiche is impounded by Attoyac Bayou WS NRCS Site 23A Dam. The dam is an earth fill dam with a length of 1,605 feet and a maximum height of 59 feet². The elevation at the top of dam is 365 feet with a total storage of 27,225 acre-feet². The dam construction was completed in 2006. Table 1-1 shows the elevation, capacity, and area for Lake Naconiche. Figure 1-1 is a location map showing Lake Naconiche.

Table 1-1: Elevation, Storage and Area Relationships for Lake Naconiche

Elevation (feet-msl)	Capacity (acre-feet)	Area (acre)
312	0	0
316	24	12
320	118	35
324	346	79
324.2	361	83
328	812	154
332	1,644	262
338	2,884	358
340	4,510	455
344	6,554	567
*348	9,072	692
352	12,100	856
**355	15,031	1,003
356	15,966	1,055
360	20,544	1,236
364	25,842	1,453
***365	27,225	1,512

^{*}Normal pool elevation

^{**}Emergency spillway elevation

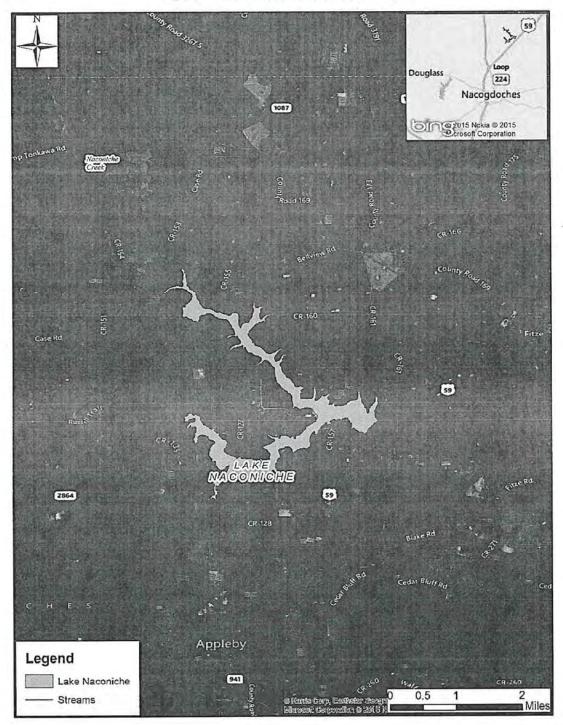
^{***}Top of dam elevation

¹ Texas Natural Resource Conservation Commission. Water Right Permit Number 5585, July 3, 1998.

² Texas Commission on Environmental Quality, State Inventory of Dams, November 2007.



Figure 1-1: Lake Naconiche Location Map





1.2 PROPOSED AMENDMENT FOR DIVERSION

Lake Naconiche is currently being operated for flood control and recreational purposes. The proposed amendment would authorize diversion of 4,750 acre-feet per year for multi-purpose use from the perimeter of Lake Naconiche. The demand pattern used in the modeling was based on the municipal pattern (UMUN) in the Neches WAM identified in Appendix B. It is also proposed for the amendment that special condition 4 (b) be removed and replaced with SB3-based environmental flow criteria outlined in Section 2.2 of this report.

The proposed amendment is a recommended project in the 2011 Region I Water Plan and the 2012 State Water Plan. Based on the regional water plan the potential customers include Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC in Nacogdoches County.



2.0 WATER AVAILABILITY ANALYSIS

2.1 FNI BASE MODEL

FNI obtained the Neches River Water Availability Model, Full Authorization Scenario (TCEQ WAM) from the Texas Commission on Environmental Quality (TCEQ) on September 8, 2014. The TCEQ Neches WAM contains SB3 environmental flows. Figure 2-1 shows the locations of the SB3 measurement points. Based upon an initial review of the TCEQ model, FNI identified three changes which are incorporated into the FNI Base Model used for all of the model runs:

 The TCEQ WAM had an annual instream flow target of 57,196 acre-feet per year for Lake Naconiche. This is substantially higher than the amount in the permit, which corresponds to 4,744 acre-feet per year. The instream target along with the UC record were changed in the FNI Base Model to match the permit instream flow requirements as shown in Table 2-1.

Table 2-1: Instream Flow Requirements Authorized by Permit Number 5585

Month	cfs	Acre- feet
January	8	492
February	12	666
March	15	922
April	11	655
May	9	553
June	4	238
July	3	184
August	3	184
September	3	179
October	3	184
November	3	179
December	5	307
Annual		4,744

2. The TCEQ WAM includes subordination of Lake Sam Rayburn for all junior municipal water rights, and water rights upstream of the proposed Ponta Dam on the Angelina River and the proposed Weches Dam on the Neches River, including Lake Naconiche. The subordination method employed in the TCEQ WAM excludes not only Sam Rayburn from making priority calls from

County of Nacogdoches



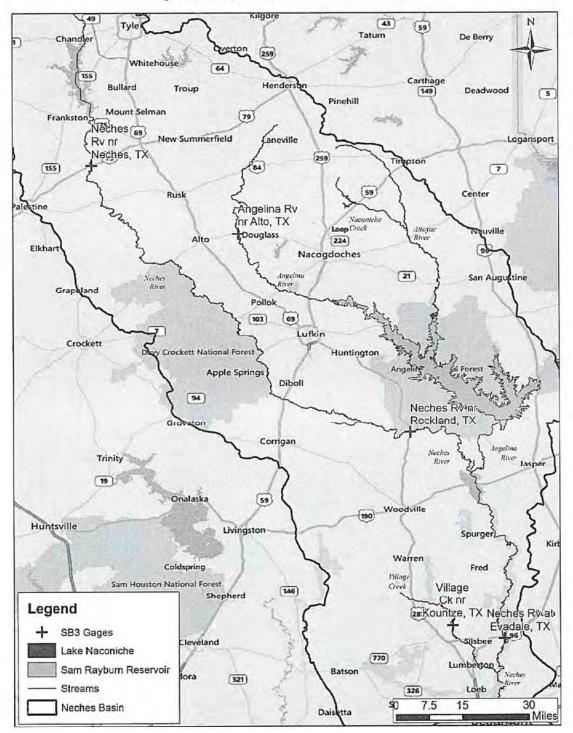
upstream water rights, but also all water rights below Sam Rayburn do not make priority calls. For Lake Naconiche, the subordination method was changed in the FNI Base Model so that any streamflow made available through subordination was limited to the depletions made at the Lake Sam Rayburn control point. This method is slightly more conservative than the one used in the TCEQ WAM. The method still excludes consideration of flows below Lake Sam Rayburn.

3. In the TCEQ WAM, there were a few major reservoirs subject to the Lake Sam Rayburn subordination that were not being modeled in the first simulation. The code for these reservoirs were added so that they are present in the first simulation, but without applying subordination. A second set of WR/WS records were added to the second simulation that allow depletion of the additional flow made available through the subordination. These changes were applied to multiple water rights and are documented in Appendix B.

In addition to the above modifications, a new water right was added to the FNI Base Model to model the new diversion authorization at a priority date of 2016.



Figure 2-1: Neches River Basin and SB3 Gages





2.2 SB3-BASED ENVIRONMENTAL FLOWS

The only SB3 measurement point that is downstream of Lake Naconiche is the Neches River at Evadale, which is below Sam Rayburn. During the analysis FNI determined that the Lake Sam Rayburn subordination resulted in the SB3 environmental flows not being applied at Lake Naconiche. In order to apply SB3 environmental flows at Lake Naconiche, FNI developed SB3-Based Environmental Flow Criteria using the SB3 criteria at the Angelina River near Alto gage. Table 2-2 shows the base flow and subsistence environmental flow criteria for the Angelina River near Alto gage.

Table 2-2: Angelina River near Alto Base and Subsistence Flow Conditions

	Flow in cfs			新 医 加斯曼
	Winter	Spring	Summer	Fall
Subsistence	55	18	11	16
Base	277	90	40	52

Lake Naconiche has a drainage area of 28 square miles in the WAM. The drainage area at the Angelina River near Alto gage according to USGS is 1,276 square miles. The ratio of the drainage areas is 0.022. The base and subsistence flows in Table 2-2 were multiplied by the drainage area ratio to determine the base and subsistence flows for the SB3-Based Environmental Flow Criteria at Lake Naconiche, shown in Table 2-3. These environmental flows were applied at the lake at the 1997 priority date of the original storage authorization.

Table 2-3: SB3-Based Environmental Flow Criteria for Base and Subsistence Flow Conditions

	Flow in cfs				
7. 国际市场信	Winter	Spring	Summer	Fall	
Subsistence	1.2	0.4	0.2	0.4	
Base	6.1	2.0	0.9	1.1	

According to TAC 298.285 it is not necessary for water rights which store or divert less than 10,000 acrefeet per year to preserve or pass high flow pulses. Since Lake Naconiche stores less than 10,000 acrefeet and the new authorization will be less than 10,000 acrefeet per year only base and subsistence criteria were incorporated into the SB3-Based Environmental Flow Criteria.



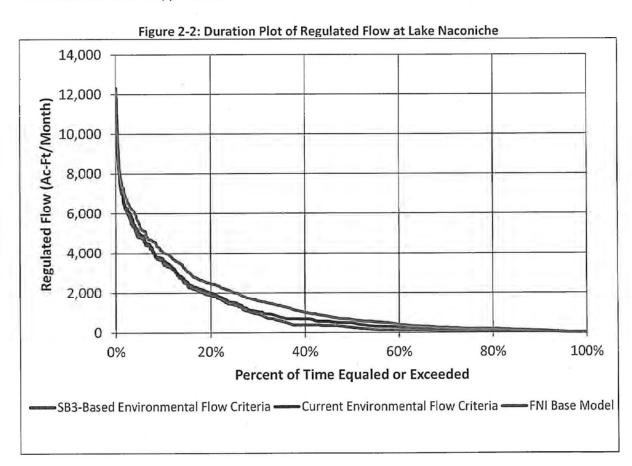
2.3 RESULTS

The yield using the FNI Base Model with the environmental flows in the current permit and with the SB3-Based Environmental Flow Criteria are shown in Table 2-4. The yields using the SB3-Based Environmental Flow Criteria are greater than the yield using the existing environmental flows because the SB3-based criteria are less than those found in the existing permit.

Table 2-4: Lake Naconiche Yield with Environmental Flow Criteria from Current Permit and SB3-Based Environmental Flow Criteria

Scenario	Yield (Acre-feet/Year)
Current Environmental Flow Criteria	3,160
SB3-Based Environmental Flow Criteria	4,750

Figure 2-2 compares the range of regulated flows just downstream of Lake Naconiche from the FNI Base Model without the new authorization to the flows with the new diversion using the two different approaches to environmental flows. As shown on this graph, there is little difference in the regulated flows between the two approaches.





3.0 AFFECTED ENVIRONMENT

The use of Lake Naconiche as a water supply source as opposed to a recreational lake will have some impact on the aquatic habitat within the lake. This is shown in Figure 3-1 by comparing the storage trace from the FNI Base model and the proposed diversion of 4,750 acre-feet per year with the SB3-Based Environmental Flow Criteria. It is not anticipated that the proposed diversion will impact the downstream aquatic environment since those flows are protected by environmental flow criteria. The fluctuation in lake levels will have some impact on the use of Lake Naconiche for recreation.

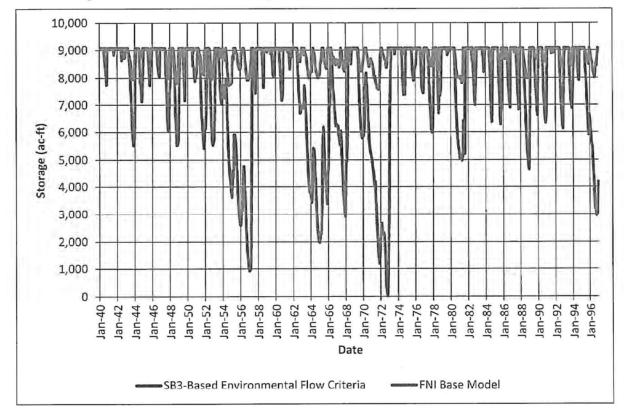


Figure 3-1: Lake Naconiche Storage Trace with and without Proposed Amendment

It is not anticipated that diversion from the lake will have significant impact on the water quality of the lake or downstream water quality. An analysis of the water quality samples at the USGS Gage Attoyac Bayou near Chireno, downstream of Lake Naconiche, indicates good overall water quality as shown in Table 3-1. During periods of low lake levels water quality in the lake may be diminished but the overall quality should remain good.



Table 3-1: USGS Gage Attoyac Bayou near Chireno Water Quality Data

Parameter	Median of Samples
Discharge (cfs)	259
Specific conductance (µs/cm)	110
Dissolved Oxygen (mg/l)	7.0
Total Dissolved Solids (mg/l)	70
pH	7.1

The special conditions of the May 1999 Final Supplemental Environmental Impact Statement (EIS) identified an 852 acre mitigation area to be located in Nacogdoches, Rusk, Shelby and San Augustine Counties. The EIS also identified a separate 176 acres of mitigation area on the perimeter of Lake Naconiche in the May 1998, "Final Monitoring Plan for the Lake Naconiche Created Wetlands" prepared by the Stephen F. Austin School of Forestry. The Final Monitoring Plan included the conversion of 176 acres to hydric soil thereby allowing the development of emergent wetlands along the shoreline of Lake Naconiche. The monitoring of those wetlands has continued since the lake began filling in 2006.

In the Stephen F. Austin School of Forestry 2015 preliminary report, groundwater monitoring results from all years were examined and it was determined that an elevation of 352 feet MSL was an appropriate estimation of where wetlands will be created around the entire perimeter of the lake. The surface area of projected wetlands based on the water table reaching 352 feet MSL around the lake was approximately 188 acres. Vegetation in areas predicted to become wetlands was generally healthy and that there was no difference in vegetation condition along an elevation gradient.

Many seasonal and temporary wetlands experience periods of drought at some point. These wetlands tend to fill during the wetter winter months, dry during the hotter summer months and then refill. This is a natural and common occurrence for wetlands in Texas. In fact, these periods of drying and filling can be beneficial for the development of certain species and promote wetland plant diversity. If low water levels at Lake Naconiche occur for an extended period of time due to the proposed diversion, some wetland plant species dependent on being submerged or inundated might go dormant, or potentially die. Other plant species not dependent on being submerged or inundated would likely survive these periods of low water levels. This is expected since the average annual rainfall in Nacogdoches County is approximately 49 inches (TWDB Quadrangle 613, 1940-2013) which would likely provide the moisture necessary for many wetland plant species to survive within the littoral zone/fringe wetlands of the reservoir once they become established. Figure 3-2 shows the elevation during the longest period where the reservoir is below



the conservation elevation of 348 feet and the corresponding monthly rainfall. This indicates that even during periods of extended drawdown the fringe wetlands will experience rainfall and wetting of soils sufficient to maintain wetland plant species that do not need to be submerged until Lake Naconiche can refill.

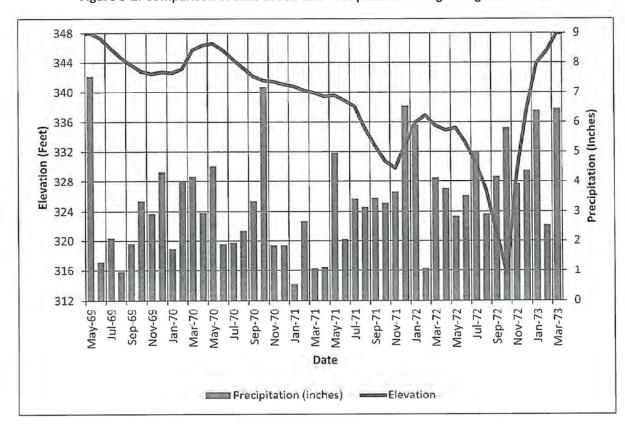


Figure 3-2: Comparison of Lake Levels and Precipitation during Drought of Record



4.0 IMPACTS OF PROPOSED WATER RIGHTS

4.1 NO INJURY ANALYSIS

Potential impacts of the proposed water right on existing water rights were evaluated using the FNI Base Model without the amendment and the project model using the SB3-Based Environmental Flow Criteria. No water rights were impacted by this amendment. Details of the no injury analysis can be found in Appendix B.

4.2 IMPACT ON INSTREAM USES

Because the flow criteria developed for Lake Naconiche are consistent with the SB3 process, the SB3-Based Environmental Flow Criteria should be protective of instream uses.

4.3 IMPACTS ON BAYS AND ESTUARIES

There will be minimal impact on bays and estuaries since diversions will be subject to SB3 instream flow requirements. The annual average regulated flow at the Gulf of Mexico is shown in Table 4-1. The percentage of time for regulated flows at the Gulf of Mexico are shown in Figure 4-1. The change in median annual regulated flows at the Gulf of Mexico is approximately 4,745 acre-feet, a difference of about 0.12%.

Table 4-1: Statistics of Annual Regulated Flows at the Gulf of Mexico

Connecto		Regulated Flow	(Acre-feet/Year)	1 11
Scenario	5%	10%	25%	50%
FNI Base WAM	591,881	689,575	1,735,190	4,112,056
SB3 Environmental Flow Criteria WAM	587,796	693,600	1,756,741	4,118,363
Difference from FNI Base WAM	4,085	-4,025	-21,551	-6,307
Percent Difference from FNI Base WAM	0.69%	-0.58%	-1.24%	-0.15%

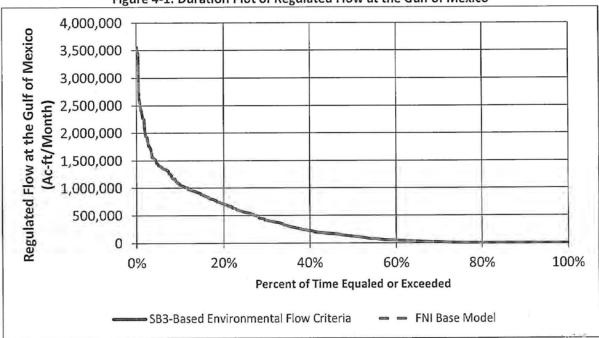


Figure 4-1: Duration Plot of Regulated Flow at the Gulf of Mexico

4.4 IMPACTS ON WETLANDS

The proposed amendment to allow for diversion has slight potential to impact wetland areas along the perimeter of the lake since diversions will lead to increased water level fluctuations. The longest period below the conservation pool is nearly four years which occurs from June 1969 through February 1973 and corresponds with the critical drought. However, due to local precipitation the impacts are expected to be minimal. Further discussion of the potential impact to wetlands is included in Section 3.0.

4.5 WATER CONSERVATION

Nacogdoches County has not been required to submit a water conservation plan in the past since it is not a retail or wholesale water supplier, nor does the existing permit (5585) appropriate 1,000 acre-feet or more of surface water. Nacogdoches County will prepare a water conservation plan in accordance with Chapter 288 rules to be provided to the TCEQ at a later date in conjunction with the proposed amendment.

County of Nacogdoches



4.6 CONSISTENCY WITH REGIONAL WATER PLANS

Lake Naconiche is a recommended strategy in the 2011 Region I Water Plan (Lake Naconiche Regional Water Supply System) for Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC³.

4.7 OTHER POTENTIAL IMPACTS

Since Lake Naconiche is already constructed there will be minimal impacts to water quality, the environment or agricultural resources.

³Alan Plummer and Associates Inc., Freese and Nichols Inc., LBG Guyton and Walker Partners. 2011 Region I Plan, September 2010, pgs. 4C-27-31

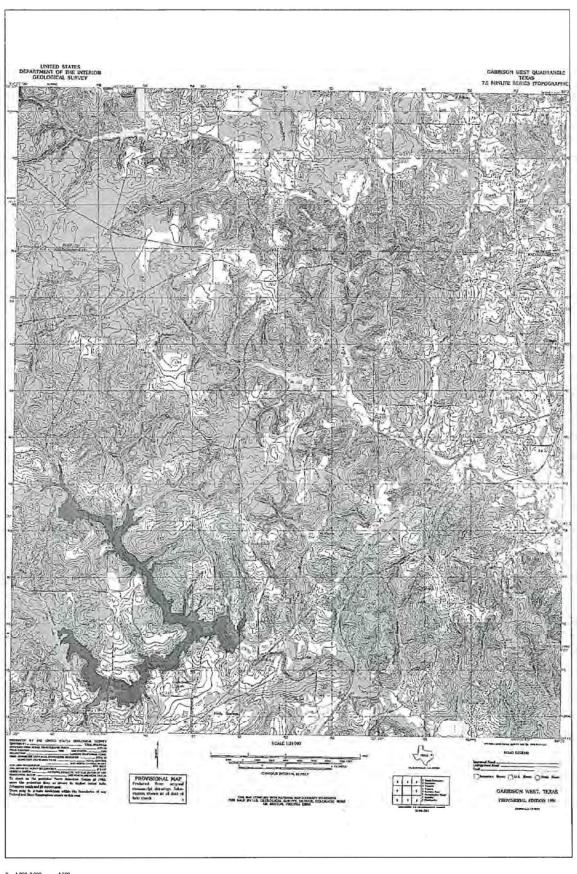


Appendix A USGS 7.5 Minute Topographic Map

Nacogdoches County



Full Scale 7.5 Minute USGS Garrison West Quadrangle Map Included in supplementary sleeve



0 1,000 2,000 4,000 Feet





Appendix B WAM Modeling and No Injury Analysis

BU

2



Modifications to the Neches River WAM

The analyses in this water right application are based on the October 2012 version of the Neches River WAM, full authorization scenario and including Senate Bill 3 instream flow requirements, using the August 2013 version of WRAP-SIM. (WRAP-SIM is the computer program used to run the WAM.).

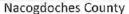
Base WAM Changes ** FNI Change - Changed to match the pattern in the permit UCUT5585 492 666 922 655 553 238 184 184 179 184 179 307 **UCUT5585 0.101 0.152 0.190 0.139 0.114 0.051 **UC 0.038 0.038 0.038 0.038 0.038 0.063 ** Sub modeled right - Lake Palestine FNI change - add non-subordination rights to first simulation WR3254N1 196000 UMUN19560430 1 3254M1 A3254 WSPALEST 410000 PX 3 ** WR3254N1 16400 UMUN19690915 3254M3 3254 32541s WSPALEST 411840 PX 3 **PX 1 4411N2 WR3254N1 400 UMUN19700914 1 3254A3 3254 32541s WSPALEST 411840 PX 3 **PX 2 1 4411N2 ** IF3254N2 IFCON19670309 IFUNRMWD 3254N2 TO 2 ADD CONT 302. 3254N1 TO 2 SUB WR3254N2 0 19670309 FILLDIVDAM1 3254 WSUNRMDW 119 1.3676 0.615 1 4411N2 WR3254N2 18000 UMUN19830425 3254M5 3254 3254dd WSUNRMDW 119 1.3673 0.615 WSPALEST 411840 OR3254N1 411840 PX 3 **PX 1 4411N2 7310 UMUN19841001 WR3254N2 3254M7 3254 3254dd WSUNRMDW 119 1.3673 0.615 WSPALEST 411840 OR3254N1 41,1840 1 PX 3 **PX 至415到2 ** ** FNI change - Putting in at same priority date as BU from Steinhagen. This minimizes picking up extra available flow not accessed because of PX 3 above. using option 2 to limit to depletions at subordinated reservoir. WR3254N2 0 20091129 3254divDamSub 3254 119 1.3676 WSUNRMDW 0.615 BU 3254dd 2 4411N2 PX WR3254N1 20091129 3254PalSub 3254 WSPALEST 411840

32541s

2 4411N2



```
** Lake Columbia
** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
separate right
WR 4537A
         53307
                    UMUN19851122 1
                                                                       4537M1
                                                                                 4537 4537s
WSCOLUMB 195500
     3
PX
**PX
                         1 4411A1
                                                                       4537M2
WR 4537A
            2200
                    UMUN19851122 1
                                                                                 4537
                                                                                       4537s
WSCOLUMB 195500
    3
 **PX
        2
                        1 4411A1
WR 4537A
         30000
                    UIND19851122 1
                                                                       4537I1
                                                                                 4537
                                                                                      4537s
WSCOLUMB 195500
PX
      3
        2
                        1 4411A1
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR 4537A
                       20091129 1
                                                                      4537sub
                                                                                 4537
WSCOLUMB 195500
                                  4537s
BU
                      2 4411A1
PX
       2
** Lake Striker
** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
separate right
           5000
                    UIND19551205 1
                                                                       4847I1
                                                                                 4847
WR 4847A
WSSTRIKR
          26500
PX
      3
                                                                       4847I2
                                                                                 4847
WR 4847A
              0
                    UIND19560430 1
WSSTRIKR
           26960
PX
       3
                                                                       484713
                                                                                 4847
WR 4847A
            5600
                    UIND19680205
            5600
                    UIND19680205 2
                                                                         484713
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 **WR 4847A
WSSTRIKR 26960
PX
      3
 **PX
        2
                        1 4411A1
 ** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
 ** using option 2 to limit to depletions at subordinated reservoir.
                       20091129
                                                                      4847sub
                                                                                 4847
WR 4847A
WSSTRIKE
           26960
                         4847I3
BU
                      2 4411A1
PX
       2
 ** Lk Nacogdoches
 ** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
 separate right
                                                                        4864M1
                                                                                 4864
 WR 4864A 22000
                    UMUN19700105 1
WS NACH
           41000
PX
      3
 **PX
                         1 4411A1
 **
WR 4864A
              0
                     REC19770627 1
                                                                        4864R1
                                                                                 4864
WS NACH
           42318
                        1 4411A1
 ** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
 available flow not accessed because of PX 3 above.
 ** using option 2 to limit to depletions at subordinated reservoir.
WR 4864A
              0
                       20091129
                                                                       4864sub
                                                                                 4864
```





```
WS NACH
         42318
BU
                        4864M1
                     2 4411A1
PX
   TPWD wetlands
** FNI change - added group identifier
** FNI change - Add priority diversion to first simulation, explicity model subordination as a
separate right
             0 WTFILL19960709
                                                                      555501
                                                                               5555
WR555541
WSWETLAN
            168
SO
            168
                   168 5555A1
IF5555A1
          6460 TPWDIF20041103
                                   1
                                                     IF5555A2
WR5555A1 10000
                      20041103 1
                                                                      555502
                                                                               5555
    3
PX
       2
                       1 4411A1
**PX
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking ap extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR5555A1
                                                                     5555sub
                                                                               5555
                      20091129
BU
                        555502
                     2 4411A1
      2
PX
**
** FNI Change - Changed to match IF requirment in the permit
                                     1
                                                         5585N1
**IF 5585A 57196 UT558519970430
IF 5585A 4744 UT558519970430
                                                       5585N1
** FNI change - Add priority diversion to first simulation, explicity model subordination as a
separate right
             0
WR 5585A
                   REC19970430 1
                                                                      5585R1
                                                                               5585
WSNACKNK
           9072
**PX 2
                       1 4411A1
PX
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
   using option 2 to limit to depletions at subordinated reservoir.
                   REC20091129
                                                                      5585R2
                                                                               5585
WR 5585A
              0
WSNACKNK
           9072
PX
    2
                     2 4411A1
** Lake Pinkston
** FNI change -
                  Add priority diversion to first simulation, explicity model subordination as a
separate right
           3800
                  UMUN19720702 1
                                                                      4404M1
                                                                               4404
WR 4404A
WSPINKST
           7380
    3
PX
**PX
       2
                       1 4411A1
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR 4404A
                      20091129
                                                                     4404sub
                                                                              4404
WSPINKST
           7380
BU
      2
                     2 4411A1
PX
** FNI change - added group identifier
                                                                      4409M1
                                                                              4409
WR 4409A 500 LMUN19571101 1
```

 $\star\star$ FNI change - Add priority diversion to first simulation, explicity model subordination as a separate right



WR 4409A 785 WSCARRIZ 2750 PX 3	LMUN20000222 1.7193 0.6199	0		4409M2	4409
**PX 2 ** FNI change - Pu available flow not			ty date as BU from Rayburn. 3 above.	This minimize	s picking up extra
** using option : WR 4409A			at subordinated reservoir.	4409sub	4409
** since we comb	ined several to u		s type 2 - no refill until a up identifiers several no lo		dination done
** Lake Columbia **WR4411A1 WR4411A1 WSRAYBRN 2898200 BU 0 0	20091129 20091129 4537sub	2		BURAYBURN1 BURAYBURN1	4411 4411
BU 0 0 **BU 0 0 PX 2 **					
**WR4411A1 **WSRAYBRN 2898200 **BU 0 0				BURAYBURN2	4411
PX 2 ** *******************************	20091129			BURAYBURN3	4411
**WSRAYBRN 2898200 **BU 0 0 **PX 2					
** TPWD wetlands **WR4411A1 WR4411A1 WSRAYBRN 2898200	20091129	2		BURAYBURN4 BURAYBURN4	4411 4411
BU 0 0 0 **BU 0 0	5555sub 555502				
** FNI change - m ** since we comb	ade this group of ined several to u	f rights	s type 2 - no refill until a	after all subco	cdination done
** Lake Columbia					
**WR4411A1	20091129			BURAYBURN1	4411
WR4411A1 WSRAYBRN 2898200	20091129	2		BURAYBURN1	4411
BU 0 0	4537sub				
**BU 0 0 PX 2	4537M1				
**					
**WR4411A1 **WSRAYBRN 2898200	20091129			BURAYBURN2	4411
**BU 0 0 **PX 2					
**WR4411A1	20091129			BURAYBURN3	4411
**WSRAYBRN 2898200 **BU 0 0 **PX 2	453711				
** TPWD wetlands **WR4411A1 WR4411A1	20091129 20091129			BURAYBURN4 BURAYBURN4	4411 4411
WSRAYBRN 2898200 BU 0 0 **BU 0 0	5555sub 555502				
PX 2 ****STRIKER **WR4411A1 WR4411A1 WSRAYBRN 2898200	20091 1 29 20091129			BURAYBURN5 BURAYBURN5	4411 4411



BU 0 0 4847sub		
**BU 0 0 4847I3		
PX 2 ** Lake Palestine at diversion dam		
**WR4411N2 20091129	BUSTEINHA6	4411
WR4411N2 20091129 2		4411
WSSTEINH 94250		
BU 0 0 3254divDamSub		
**BU 0 0 3254M3		
PX 2 ** Lake Palestine lakeside		
** Lake Palestine lakeside **WR4411N2 20091129	BUSTEINHA6	4411
WR4411N2 20091129 2	BUSTEINHA7	4411
WSSTEINH 94250	Door Drilling,	
BU 0 0 3254PalSub		
**BU 0 0 3254A3		
PX 2		
**	DUGMET VII O	4411
**WR4411N2 20091129 **WSSTEINH 94250	BUSTEINHA8	4411
**BU 0 0 3254M5		
**PX 2		
**WR4411N2 20091129	BUSTEINHA9	4411
**WSSTEINH 94250		
**BU 0 0 3254M7		
**PX 2		
** add municipal beneficiaries of Condition C		
** Lake Nacogdoches **WR4411A1 20091129	DUDA VDUDA O	4411
**WR4411A1 20091129 WR4411A1 20091129 2	BURAYBUR10 BURAYBUR10	4411
WSRAYBRN 2898200	Dotts:Dotts:D	3477
BU 0 0 4864sub		
**BC 0 0 4864M1		
PX 2		
**		
**WR4411A1 20091129	BURAYBUR11	4411
**WR4411A1 20091129 **WSRAYBRN 2898200	BURAYBUR11	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1	BURAYBUR11	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2	BURAYBUR11	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1	BURAYBUR11 BURAYBUR12	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston		
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129	BURAYBUR12	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2	BURAYBUR12	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1	BURAYBUR12	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2	BURAYBUR12	4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk	BURAYBUR12 BURAYBUR12	4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk	BURAYBUR12 BURAYBUR12	4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404m1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409m2	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 VSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR44411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR7AYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409m2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404m1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409m2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR44411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 50091129 WRA4411A1 50091129 WRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 0 5585R1	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR4441A1 20091129 WR4441A1 20091129 WR4441A1 20091129 WR4441A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 5585R2 PX 2 ** WR4411A1 20091129 WRAYBRN 2898200 PX 2 ** WR4411A1 20091129 WRAYBRN 2898200 PX 2	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14 REFILLRB	4411 4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WR4411A1 20091129 **WSRAYBRN 2898200 **BU	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14 REFILLRB	4411 4411 4411 4411 4411



The following records were added to the neches 3.dat file to model the proposed diversion from Lake Naconiche.

```
FNI change - pattern for new base eflow at lake Naconiche
UC nksub
           74
                      74
                                 24 24
                                             24
                                                           397
                 68
            15
                   15
                                 22
                                        21
                                               22
UC
                          14
UC nkbas
           375
                  341
                         375
                                118
                                       122
                                              118
                                                          1817
UC
            54
                   54
                          52
                                 70
                                        68
                                              70
** FNI change - add control point for subsistence calculations for Lake Naconiche
**CP 5585A
           ATCH
                                   7
CP 5585A nksubs
                                  7
CPnksubs
          ATCH
                                            5585A
**FNI change dummy CPs for Lake Naconiche
CPfknk02
          OUT
                                  2
                                      NONE
                                             NONE
           OUT
                                      NONE
                                             NONE
CPfknk03
** FNI change - fake CPs associated with Lake Naconiche SB3 instream flows
CT
** FNI Change - Changed to match IF requirement in the permit
                                 1
                                                      5585N1
****IF 5585A 57196 UT558519970430
**IF 5585A 4744 UT558519970430
                                                    5585N1
** FNI change - add instream flow based on Alto multiplied by DA ratio. Giving everything a priority
junior to SB3
    only base flows apply since diversion or storage is less than 10,000
** Subsistence flow at CP just downstream of reservoir
   giving it priority date of original certificate.
         397 nksub19970430
                                                 nksubsis
IFnksubs
** Regulated flow - for checking
                                                                         5585
                                                                nklook
WRfknk02
                    19970430
TO
     2
                  ADD
                                     5585A
** Holds the monthly target
                                                             holdnkbase
WRfknk02 1817 nkbas19970430
                                                                         5585
** Ratio of target to regulated flow
WR£knk03
               nkbas19970430
                                                               nkOnOff
                                                                         5585
                                     5585A
                                                                  CONT
TO
    2 .
                 ADD
     6
                  DIV
                                                      holdnkbase
TO
** Flow switch based on ratio calculated above. Applied if > 1
IF 5585A 1817 nkbas19970430
                                                  nkbase
FS 5 fknk03
                1
                                  1 9999999
   Original authorization.
WR 5585A
            0
                  REC19970430 1
                                                                5585R1
                                                                         5585
          9072
WSNACKNK
**PX
       2
                     1 4411A1
**PX
       3
                      2 4411A1
** FNI Change - New WR to calculate yield. With subordination, but at a 2016 priority date
         4750
                                                                5585FY
                UMUN20160000 1
WR 5585A
WSNACKNK
          9072
PX
                    2 4411A1
** end FNI change
** FNI change - Lake Naconiche, change to priority date of new right, allow to fill at that date.
**WR4411A1
                      20091129
                                                               BURAYBUR14
                                                                           4411
                                                               BURAYBUR14
                                                                           4411
**WR4411A1
                       20091129
WR4411A1
                     20160000 1
                                                             BURAYBUR14
                                                                         4411
WSRAYBRN 2898200
      0
              0
                        5585R1
**BU
**BU
       0
              0
                        5585R2
```



Nacogdoches County

BU 0 0 5585FY PX 2

The following records were added to the neches3.dis file.

** FNI change
FDnksubs ATCH 0

**

** FNI change
WPnksubs 28.07 42 46

**

No changes were made to the other input files.



The impact analysis for the diversion from Lake Naconiche, modeled as described above, has no impact on water rights in the Neches WAM (Table B-1). Table B-1 shows the *difference* between the FNI Base WAM model run and the modified WAM for all water rights in the October 2012 version of the Neches River WAM. All the values for water rights in the Neches WAM are zero which indicates that there is no change in reliability.

Table B-1: Difference between FNI Base WAM and Lake Naconiche Model

C MARRIES SERVING	Difference in	Difference in	Difference in Reliabilit		
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)	
3306R1					
4411A2	0	0	0	0	
4411A3	0	0	0	0	
4411A4	0	0	0	0	
4411A5	0	0	0	0	
443411					
443411					
4415M1	0	0	0	0	
3237M1	0	0	0	0	
3274M4	0	0	0	0	
4411M5	0	0	0	0	
4411M6	0	0	0	0	
441113	0	0	0	0	
441114	0	0	0	0	
4415M2	0	0	0	0	
441511	0	0	0	0	
4867A1	0	0	. 0	0	
441011	0	0	0	0	
3233A1	0	0	0	0	
4856R1					
4861A1	0	0	0	0	
4412 1	0	0	0	0	
4866A1	0	0	0	0	
3286A1	0	0	0	0	
3221A1	0	0	0	0	
3221A2	0	0	0	0	
3221A3	0	0	0	0	
4388R1					
4402M1	0	0	0	0	
3274M5	0	0	0	0	
443711					
443711					
4401A1	0	0	0	0	
4396A1	0	0	0	0	
4857A1	0	0	0	0	
4853M1	0	0	0	0	



NY HOW DELICING	Difference in	Difference in Mean Shortage	Difference in Reliability	
NAME	Target Diversion		Period Volume	
	(Ac-Ft/Yr)	(Ac-Ft/Yr)	(%)	(%)
485311	0	0	0	0
3222G1	0	0	0	0
4387A1	0	0	0	0
4843R1				
4427R1				
443311				
443311				
3277A1	0	0	0	0
4848R1				
4400R1				
4406A1	0	0	0	0
3275A1	0	0	0	0
3222G2	0	0	0	0
3302R1				
3289A1	0	0	0	0
4853E	0	0	0	0
4839A1	0	0	0	0
4841A1	0	0	0	0
3222G3	0	0	0	0
4871R1				
3256M1	0	0	0	0
325611	0	0	0	0
4399M1	0	0	0	. 0
3253A1	0	0	0	0
3274M3	0	- 0	0	0
3274R1				
3244A1	0	0	0	. 0
3297A1	0	0	0	0
3296A1	0	0	0	0
3266A1	0	0	0	0
3283A1	0	0	0	0
3284A1	0	0	0	0
3280A1	0	0	0	0
3298A1	0	0	0	0
4858A1	0	0	0	0
4858A2	0	0	0	0
3290A1	0	0	0	0
484711	0	0	0	0
4393D2	0	0	0	0
3254M1	0	0	0	0
484712				
3285A1	0	0	0	0
4386A1	0	0	0	0
3295A1	0	0	0	0
4382A1	. 0	0	0	0
4853J				



THE RESERVE THE RE	Difference in	Difference in	Difference in Reliability	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)
3299A1	0	0	0	0
4414A1	0	0	0	0
4408R1				
3291A1	0	0	0	0
439311	0	0	0	0
3249R1				
4409M1	0	0	0	0
3247A1	0	0	0	0
3236A1	0	0	0	0
3287A1	0	0	0	0
3276A1	0	0	0	0
443811				
4438I1				
3226A1	0	0	0	0
3260R1				
3252A1	0	0	0	0
3299A2	0	0	0	0
4859A1	0	0	0	0
483911	0	0	0	0
4419R1				
3293A1	0	0	0	0
4860A1	0	0	0	0
4395A1	0	0	0	0
FILL STEINHA				
FILLRAY				
4411M4	0	0	0	0
441111	0	0	0	. 0
441112	0	0	0	0
4411A1	0	0	0	0
4411M1	0	0	0	0
4425R1				
4840A1	0	0	0	0
4397A1	0	0	. 0	0
3292A1	0	0	0	0
3294A1	0	0	0	0
3294A2	0	0	0	0
4869A1	0	0	0	0
4865A1	0	0	0	0
4846A1	0	0	0	0
3251A1	0	0	0	0
4431A1	0	0	0	0
3245A1	0	0	0	. 0
3235A1	0	0	0	0
4380R1				
438001	0	0	0	0
4385R1				



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Diffe Period (%)	rence in Reliability Volume (%)
3278A1	0	0	0	0
3288A1	0	0	0	0
4850A1	0	0	0	0
4872A1	0	0	0	0
4873A1	0	0	0	0
4381R1				
438411	0	0	0	0
FILLDIVDAM1				
4403A1	0	0	0	0
3223N2	0	0	0	0
3223N1	0	0	0	0
3269A1	0	0	0	0
3279A1	0	0	0	0
3222R1				
440111	0	0	0	0
484713	0	0	0	0
3282A1	0	0	0	0
4862A1	0	0	0	0
323801				
3303A1	0	0	0	0
3300R1				
4418R1				
3254M3	0	0	0	0
4864M1	0	0	0	0
4870R1		,		
3254A3	0	0	0	0
4392A1	- 0	0	0	0
439201				
4429A1	0	0	0	0
3263R1	.0			
4426A1	0	0	0	0
4851R1				
4424R1	,			
3257R1				
4855R1				
3242R1				8
3232R1				
3227R1				
3243R1				
3228R1				
3272R1				
4404M1	0	0	0	0
3264R1				
3261A1	0	0	0	0
4405R1				
3224A2	0	0	0	0



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Differ Period (%)	rence in Reliability Volume (%)
3273R1	(ACCOUNT)	(ne roj rij	(AG)	(A)
3255R1				
4413D1	0	0	0	0
4413B3	0	0	0	-0.05
4868R1				
4379R1				
3281R1				1
3246R1	(e			×
4423R1				
3267R1				
3234R1				
3231G1	0	0	0	0
4417R1				
4430R1				
3230G1	0	0	0	0
3271R1				
4416R1				
3248A1	0	0	0	0
4854R1				
4391R1				
4428R1				
3304R1				
4420R1				
3262R1				,
4389R1				
484911				
4421R1		h .		
4845R1				
4398R1				
3240R1				
4394R1				
4844R1				
4386R1				
4407R1				
3229R1				
3305R1				
3239R1				
3241R1				
4390R1				
4842R1				
4852R1				
326831				
3258R1				
3265R1				
3270R1				
4425R2				



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Differ Period (%)	rence in Reliability Volume (%)
443611	(AC-IG/III)	(Ab-11) (III)	(20)	(70)
4436I1				7
3259G1				
4864R1				
323811	0	0	0	0
4432A1	0	0	0	0
4383A1	0	0	0	0
3224A1	0	0	0	0
3301A1	0	0	0	0
323711	0	0	0	0
3237A1	0	0	0	0
3237A2	0	0	0	0
3250A1	0	0	0	0
4863A1				
4863A2				
443511				
443511				
4030A1	0	0	0	0
4422R1				
4413A3	0	0	0	0
4118R1				
4115A1	0	0	0	0
4167R1				
418611				
418611				
3878A1	0	0	0	0
419611				
419611				
4199R1				
4219M1	0	0	0	0
4219F1	0	0	0	0
4219A1	0	0	0	0
4430A1	0	0	0	0
4269A1	0	0	0	0
4279A1	0	0	0	0
438412	0	0	0	0
4384BU	0	0	0	0
4356A1	0	0	0	0
441012	0	0	0	0
4410F1	0	0	0	0
3254M5	0	0	0	0
4370R1				
409411	0	0	0	0
409412				
4448A1	0	0	0	0
3254M7	0	0	0	0



	Difference in	Difference in	Difference in Reliability	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)
4501R1	(ACHG/H)	(MCTG) TO	\cci	(2.7)
4540R1				
4543A1	0	0	0	0
4596A1	0	0	0	0
4595R1				
4609R1				
5013R1				
5015R1				
5027 1	0	0	0	0
4537M1	0	0	0	0
4537M2	0	. 0	0	0
4537I1	0	0	0	0
504111		1		
509111				
509111				
5087R1				
5134A1	0	0	0	0
5175M1				
5181R1				
518401				
5185M1				
520611				
520611				
521311				
521311				
521311 5222R1			-	
5222KI 5228A2	0	0	0	0
5232I1	0	0	0	0
531411	0	0	0	0
5351R1	0	U	0	0
	0	0	0	0
3224A3	0	0	0	0
5389A1	0	0	-	0
5415M1		0	0	0
5484A1	0	0	0	0
5486A1		0	0	0
5508A1	0	0	0	0
5508A2	0	0		0
550801	0	0	- 0	0
555501				
5583R1			-	
5585R1			-	
561331				
5629A1	0	0	0	0
5669N1			-	
4409M2	0	0		0
5228D1	0	0	0	0



J. 1. 2 1-11 20 0	Difference in	Difference in	Difference in Reliabilit	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)
P_5757				
4413B3				
472436				
472435				
555502	0	0	0	0



Appendix C Water Right Permit 5585

THE STA DE TEXAS COUNTY OF TRAVIS

Texas Natural Resource Consermantally checked in the least true and correct Texas Natural Resource Conservation

COPY



Permanent records of the Commission.

Gluon under my light and the seal of office of the commission.

Gluon III 03 19

Gluon K. Brumm, Chlor Clerk
Texas Natural Resource
Conservation Commission

PERMIT TO APPROPRIATE AND USE STATE WATER

APPLICATION NO. 5585

PERMIT NO. 5585

TYPE: Section 11.121

Name:

County of Nacogdoches

Address:

101 West Main Street

Nacogdoches, Texas 75961

Filed:

April 30, 1997

County:

Nacogdoches

Purposes:

Flood Control and

Recreation

Watershed:

Neches River Basin

Watercourse:

Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, tributary of the Neches River

WHEREAS, the County of Nacogdoches has requested authorization to construct and maintain a dam on Naconiche Creek creating a reservoir to be used for flood control and in-place recreation purposes in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas; and

WHEREAS, the dam will be constructed by the Natural Resource Conservation Service (NRCS) and is referred to as Multi-Purpose Structure No. 23-A; and

WHEREAS, the Texas Natural Resource Conservation Commission finds that it has jurisdiction over the application; and

WHEREAS, the Executive Director has determined that although there may be some anticipated temperature differences in Naconiche Creek resulting from the construction of the proposed reservoir, these differences will probably be dissipated downstream due to springflow, seepage and vegetative cover; and

WHEREAS, the Executive Director has determined and recommended that in order to protect habitat and water quality at the reservoir site and downstream of the dam, certain special conditions be included in the permit; and

WHEREAS, the Stephen F. Austin School of Forestry has agreed to manage and monitor a wetland area around the perimeter of the reservoir in accordance with a "Final Monitoring Plan" dated May 14, 1998 that states it is intended and predicted to result in the conversion of 176 acres of land owned by the permittee to hydric soil condition due to increased saturation, thereby allowing more than 50% of the dominant vegetation of the area to propagate into obligate wetland, facultative wetland or facultative plants; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Natural Resource Conservation Commission in issuing this permit.

NOW, THEREFORE, this permit to appropriate and use State water is issued to the County of Nacogdoches, subject to the following terms and conditions:

1. IMPOUNDMENT

Permittee is authorized to construct and maintain a dam creating a reservoir in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas, on Naconiche Creek and to impound therein not to exceed 9072 acre-feet of water at a normal maximum operating elevation of 348.0 feet above mean sea level. The dam will be in the William C. Walker Survey, Abstract No. 596 and the Maria D. Castro Survey, Abstract No. 133 and Station 0+00 on the centerline of the dam at Latitude 31:7708° N and Longitude 94.5694° W, which is also N 27° W, 2650 feet from the southwest corner of the aforesaid Castro survey.

USE

Permittee is authorized to use the lake only for flood control and in-place recreational purposes with no diversion right.

3. TIME LIMITATIONS

- a. Construction of the dam herein authorized shall be commenced within two years and completed within five years from date of issuance of this permit. For the purposes of this permit, commencement of construction includes site preparation.
- b. Failure to commence and/or complete construction of the dam within the period stated above shall cause this permit to expire and become null and void, unless permittee applies for an extension of time to commence and/or complete construction prior to the respective deadlines for commencement and completion, and the application is subsequently granted.

4. SPECIAL CONDITIONS

- a. Permittee is responsible for the continuing maintenance and repair of the dam authorized herein.
- b. Permittee shall pass inflows of State water past the reservoir in such quantities as are necessary to satisfy the rights of downstream domestic and livestock users and the senior and superior rights of other authorized water users.
- c. In order to compensate for impacts to wetlands due to the construction of the aforesaid reservoir, permittee shall:
 - implement the mitigation plan developed and described in NRCS' draft and final "Supplemental Environmental Impact Statement for Attoyac Bayou Watershed in Nacogdoches, Rusk, Shelby and San Augustine Counties, Texas", which includes the purchase and preservation of an 852-acre tract of land (bottomland hardwoods) in the Angelina River Bottom;
 - ii. implement the May 14, 1998 "Final Monitoring Plan" for the "Lake Naconiche Created Wetlands" prepared by the permittee and the Stephen F. Austin School of Forestry, which includes monitoring and annual reporting to the Executive Director of the vegetation, soils and hydrology of approximately 176 acres of land owned by permittee around the perimeter of the proposed reservoir;
 - iii. achieve the <u>Minimum Success Criteria</u>" included on Page 4 of the referenced "Final Monitoring Plan" for the 176 acres of land around the perimeter of the reservoir within ten years after initial filling of the proposed reservoir and provide a report to the Executive Director documenting this achievement; and
 - iv. manage the lands included in the mitigation plan and in the monitoring plan in perpetuity, either by permittee or by its designee, so as to insure that these lands have no use inconsistent with the preservation of wetlands and wildlife habitat.
 - d. To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir:

December5 cfs	March15 cfs	June4 cfs
January8 cfs	April11 cfs	
February12 cfs	May9 cfs	

This permit is issued subject to all superior and senior water rights in the Neches 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 Natural Resource Conservation Commission and to the right of continuing supervision of State water resources exercised by the Commission.

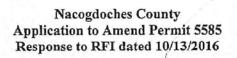
TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

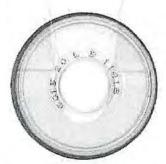
Issue Date:

JUL 03 1998

For the Commission

Attachment B Modeling Files WAM Analysis





Attachment B · November 14, 2016



8 6 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

Mr. Castleberry's Direct Line: (512) 322-5856

November 14, 2016

Ms. Olivia Ybarra Project Manager Water Rights Permitting Team (MC 160) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78753-3087

VIA ELECTRONIC TRANSMISSION AND FIRST-CLASS MAIL

Response to Request for Information Dated October 13, 2016 Nacogdoches County; WRPERM 5585; CN601098536; RN103924049 Application No. 5585A to amend Water Use Permit No. 5585 Texas Water Code § 11.122, Full Basin Mailed and Published Notice Naconiche Creek, Neches River Basin, Nacogdoches County (2733-2)

Dear Ms. Ybarra:

This letter is submitted on behalf of Nacogdoches County (the "Applicant") in response to a Request for Information ("RFI") received from the Texas Commission on Environmental Quality dated October 13, 2016 in connection with the above-referenced application (the "Application").

Response to Request No. 1:

Confirm that the application requests to change the instream flow requirement for the existing authorization in Water Use Permit 5855. Section XII on Page 4 of the supplement to the application indicates that the existing special conditions were replaced with "SB3 flow requirements," and the application modeling report discusses an analysis done with both the currently permitted flow restrictions and "SB3-Based Environmental Flow Criteria." However there is not a specific request to amend the existing instream flow requirement stated in the application.

The Applicant requests to amend the existing instream flow requirements to SB3 requirements. Please see Sections 1.2 and 2.2 of the Supplement to Application for Water Right Amendment for Diversion from Lake Naconiche ("Supplemental Report"), dated October 2015, reflecting the transition to SB3 flow requirements and attached hereto as Attachment A.

Ms. Olivia Ybarra November 14, 2016 Page 2

Response to Request No. 2:

Provide electronic copies of all modeling files used in the WAM analysis discussed in the application.

The WAM analysis discussed in the Supplemental Report is being provided electronically, attached hereto as Attachment B:

<u>FNI Base Model</u> – This model includes all the Base WAM changes shown in Appendix B of the Supplemental Report without the proposed diversion to compare the impact on water rights.

FY Current Environmental Flow Criteria – This is the model used to calculate the yield of 3,160 acre-feet per year in Table 2-4 of the Supplemental Report.

SB3-Based Environmental Flow – This model includes the SB3 criteria at Lake Naconiche with the proposed diversion. It is the model used to calculate the yield of 4,750 acre-feet per year in Table 2-4 of the Supplemental Report.

Response to Request No. 3:

Confirm the drainage area above the diversion point. Commission records indicate that the drainage area above the dam is 28.07 square miles.

The drainage area of 27.27 square miles as reported in the water right application is the drainage area cited in the Natural Resource Conservation Service structural data and the TCEQ Dam Database. The drainage area used in TCEQ WAM is 28.07 square miles. The Applicant acknowledges the drainage area for this Application is 28.07 square miles.

Response to Request No. 4:

Provide applicable water conservation plans and drought contingency plans for municipal, industrial, and agricultural uses that comply with Title 30 Texas Administrative Code (TAC) Chapter 288.

The Applicant is not currently using the water for municipal, industrial and agricultural purposes. However, 180 days prior to using the water for such purposes, the Applicant will provide the required water conservation plan or drought contingency plan in accordance with the requirements of Texas Water Code §11.002 and Title 30 of the Texas Administrative Code, Chapter 288.

Ms. Olivia Ybarra November 14, 2016 Page 3

Response to Request No. 5:

Remit fees in the amount of \$4,963.38. Please make checks payable to the TCEQ or Texas Commission on Environmental Quality.

Filing Fees (amendment)	\$ 100.00
Recording Fees (\$1.25 x 1 page)	\$ 1.25
Use Fees (\$1.00 x 4,750 acre-feet)	\$ 4,750.00
Notice Fees (Neches Basin)	\$ 213.88
TOTAL FEES	\$ 5,064.63
FEES RECEIVED	\$ 101.25
TOTAL FEES DUE	\$ 4,963.38
Fees Due Prior to Administratively Complete	\$ 2,689.63
Fees Due 180 Days After Issuance	\$ 2,375.00

Enclosed please find our firm's check in the amount of \$2,689.63 for fees due prior to the Application being declared administratively complete.

Should you have any questions, please do not hesitate to contact me or Ashleigh K. Acevedo (512) 322-5891 at your convenience. We look forward to working with you and your staff on this important matter.

Brad B. Castleberry u/p ashign a

BBC\ldp 7210876.6 **ENCLOSURES**

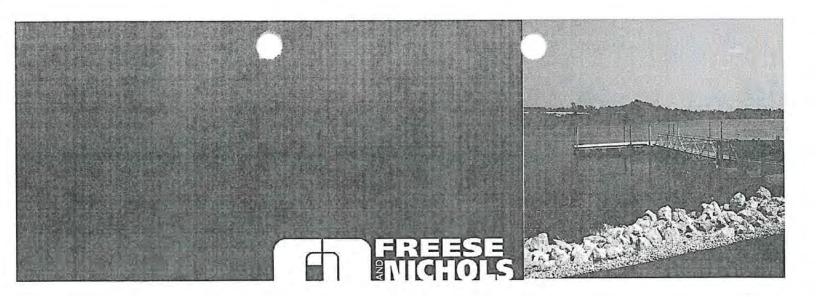
cc:

The Honorable Mike Perry

Mr. Keith Bradford Ms. Simone Kiel

Ms. Ashleigh K. Acevedo

Attachment A Supplemental Report



SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE

Prepared for:

County of Nacogdoches

October 2015

Prepared by:

FREESE AND NICHOLS, INC. 4055 International Plaza, Suite 200 Fort Worth, Texas 76109 817-735-7300

SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE

SIMONE FREY KIEL

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ONAL

Mare Jrey Keel

FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144

Jereny Rice, Hydrologist

Prepared by:

FREESE AND NICHOLS, INC. 4055 International Plaza, Suite 200 Fort Worth, Texas 76109 817-735-7300

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1.0 DESCRIPTION OF THE PROJECT

1.1 LAKE NACONICHE DESCRIPTION

Lake Naconiche is located in northeast Nacogdoches County and is authorized under Permit/Application 5585 to impound 9,072 acre-feet at elevation 348 feet msl for flood control and recreational purposes¹. Lake Naconiche is impounded by Attoyac Bayou WS NRCS Site 23A Dam. The dam is an earth fill dam with a length of 1,605 feet and a maximum height of 59 feet². The elevation at the top of dam is 365 feet with a total storage of 27,225 acre-feet². The dam construction was completed in 2006. Table 1-1 shows the elevation, capacity, and area for Lake Naconiche. Figure 1-1 is a location map showing Lake Naconiche.

Table 1-1: Elevation, Storage and Area Relationships for Lake Naconiche

Elevation (feet-msl)	Capacity (acre-feet)	Area (acre)
312	0	0
316	24	12
320	118	35
324	346	79
324.2	361	83
328	812	154
332	1,644	262
338	2,884	358
340	4,510	455
344	6,554	567
*348	9,072	692
352	12,100	856
**355	15,031	1,003
356	15,966	1,055
360	20,544	1,236
364	25,842	1,453
***365	27,225	1,512

^{*}Normal pool elevation

^{**}Emergency spillway elevation

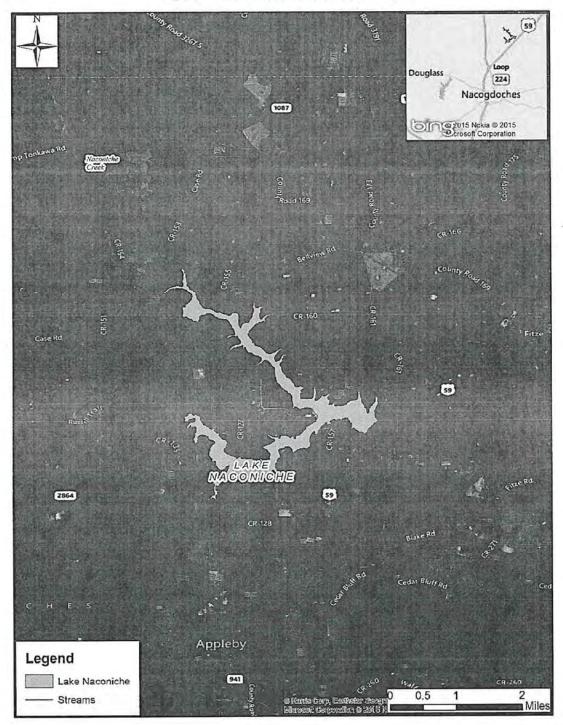
^{***}Top of dam elevation

¹ Texas Natural Resource Conservation Commission. Water Right Permit Number 5585, July 3, 1998.

² Texas Commission on Environmental Quality, State Inventory of Dams, November 2007.



Figure 1-1: Lake Naconiche Location Map





1.2 PROPOSED AMENDMENT FOR DIVERSION

Lake Naconiche is currently being operated for flood control and recreational purposes. The proposed amendment would authorize diversion of 4,750 acre-feet per year for multi-purpose use from the perimeter of Lake Naconiche. The demand pattern used in the modeling was based on the municipal pattern (UMUN) in the Neches WAM identified in Appendix B. It is also proposed for the amendment that special condition 4 (b) be removed and replaced with SB3-based environmental flow criteria outlined in Section 2.2 of this report.

The proposed amendment is a recommended project in the 2011 Region I Water Plan and the 2012 State Water Plan. Based on the regional water plan the potential customers include Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC in Nacogdoches County.



2.0 WATER AVAILABILITY ANALYSIS

2.1 FNI BASE MODEL

FNI obtained the Neches River Water Availability Model, Full Authorization Scenario (TCEQ WAM) from the Texas Commission on Environmental Quality (TCEQ) on September 8, 2014. The TCEQ Neches WAM contains SB3 environmental flows. Figure 2-1 shows the locations of the SB3 measurement points. Based upon an initial review of the TCEQ model, FNI identified three changes which are incorporated into the FNI Base Model used for all of the model runs:

 The TCEQ WAM had an annual instream flow target of 57,196 acre-feet per year for Lake Naconiche. This is substantially higher than the amount in the permit, which corresponds to 4,744 acre-feet per year. The instream target along with the UC record were changed in the FNI Base Model to match the permit instream flow requirements as shown in Table 2-1.

Table 2-1: Instream Flow Requirements Authorized by Permit Number 5585

Month	cfs	Acre- feet
January	8	492
February	12	666
March	15	922
April	11	655
May	9	553
June	4	238
July	3	184
August	3	184
September	3	179
October	3	184
November	3	179
December	5	307
Annual		4,744

2. The TCEQ WAM includes subordination of Lake Sam Rayburn for all junior municipal water rights, and water rights upstream of the proposed Ponta Dam on the Angelina River and the proposed Weches Dam on the Neches River, including Lake Naconiche. The subordination method employed in the TCEQ WAM excludes not only Sam Rayburn from making priority calls from

County of Nacogdoches



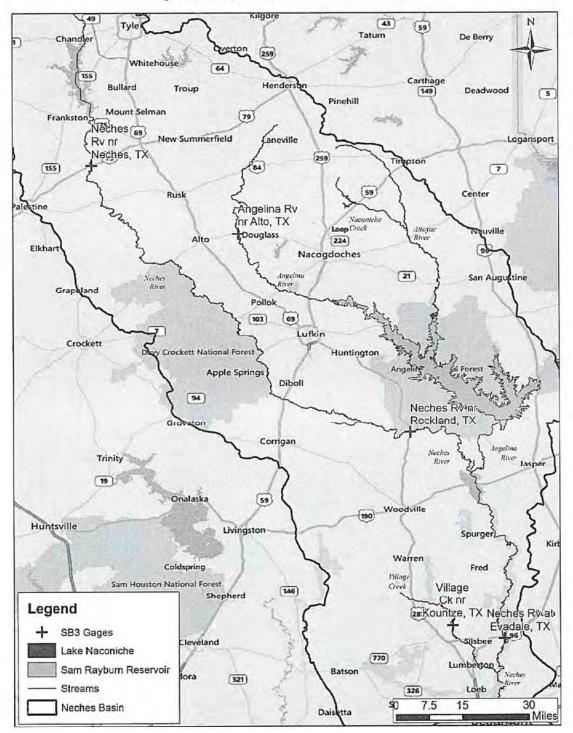
upstream water rights, but also all water rights below Sam Rayburn do not make priority calls. For Lake Naconiche, the subordination method was changed in the FNI Base Model so that any streamflow made available through subordination was limited to the depletions made at the Lake Sam Rayburn control point. This method is slightly more conservative than the one used in the TCEQ WAM. The method still excludes consideration of flows below Lake Sam Rayburn.

3. In the TCEQ WAM, there were a few major reservoirs subject to the Lake Sam Rayburn subordination that were not being modeled in the first simulation. The code for these reservoirs were added so that they are present in the first simulation, but without applying subordination. A second set of WR/WS records were added to the second simulation that allow depletion of the additional flow made available through the subordination. These changes were applied to multiple water rights and are documented in Appendix B.

In addition to the above modifications, a new water right was added to the FNI Base Model to model the new diversion authorization at a priority date of 2016.



Figure 2-1: Neches River Basin and SB3 Gages





2.2 SB3-BASED ENVIRONMENTAL FLOWS

The only SB3 measurement point that is downstream of Lake Naconiche is the Neches River at Evadale, which is below Sam Rayburn. During the analysis FNI determined that the Lake Sam Rayburn subordination resulted in the SB3 environmental flows not being applied at Lake Naconiche. In order to apply SB3 environmental flows at Lake Naconiche, FNI developed SB3-Based Environmental Flow Criteria using the SB3 criteria at the Angelina River near Alto gage. Table 2-2 shows the base flow and subsistence environmental flow criteria for the Angelina River near Alto gage.

Table 2-2: Angelina River near Alto Base and Subsistence Flow Conditions

	Flow in cfs				
	Winter	Spring	Summer	Fall	
Subsistence	55	18	11	16	
Base	277	90	40	52	

Lake Naconiche has a drainage area of 28 square miles in the WAM. The drainage area at the Angelina River near Alto gage according to USGS is 1,276 square miles. The ratio of the drainage areas is 0.022. The base and subsistence flows in Table 2-2 were multiplied by the drainage area ratio to determine the base and subsistence flows for the SB3-Based Environmental Flow Criteria at Lake Naconiche, shown in Table 2-3. These environmental flows were applied at the lake at the 1997 priority date of the original storage authorization.

Table 2-3: SB3-Based Environmental Flow Criteria for Base and Subsistence Flow Conditions

	Flow in cfs				
7. 国际市场信	Winter	Spring	Summer	Fall	
Subsistence	1.2	0.4	0.2	0.4	
Base	6.1	2.0	0.9	1.1	

According to TAC 298.285 it is not necessary for water rights which store or divert less than 10,000 acrefeet per year to preserve or pass high flow pulses. Since Lake Naconiche stores less than 10,000 acrefeet and the new authorization will be less than 10,000 acrefeet per year only base and subsistence criteria were incorporated into the SB3-Based Environmental Flow Criteria.



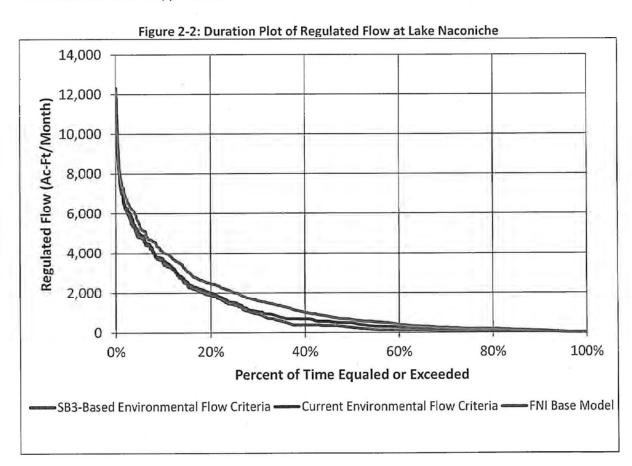
2.3 RESULTS

The yield using the FNI Base Model with the environmental flows in the current permit and with the SB3-Based Environmental Flow Criteria are shown in Table 2-4. The yields using the SB3-Based Environmental Flow Criteria are greater than the yield using the existing environmental flows because the SB3-based criteria are less than those found in the existing permit.

Table 2-4: Lake Naconiche Yield with Environmental Flow Criteria from Current Permit and SB3-Based Environmental Flow Criteria

Scenario	Yield (Acre-feet/Year)
Current Environmental Flow Criteria	3,160
SB3-Based Environmental Flow Criteria	4,750

Figure 2-2 compares the range of regulated flows just downstream of Lake Naconiche from the FNI Base Model without the new authorization to the flows with the new diversion using the two different approaches to environmental flows. As shown on this graph, there is little difference in the regulated flows between the two approaches.





3.0 AFFECTED ENVIRONMENT

The use of Lake Naconiche as a water supply source as opposed to a recreational lake will have some impact on the aquatic habitat within the lake. This is shown in Figure 3-1 by comparing the storage trace from the FNI Base model and the proposed diversion of 4,750 acre-feet per year with the SB3-Based Environmental Flow Criteria. It is not anticipated that the proposed diversion will impact the downstream aquatic environment since those flows are protected by environmental flow criteria. The fluctuation in lake levels will have some impact on the use of Lake Naconiche for recreation.

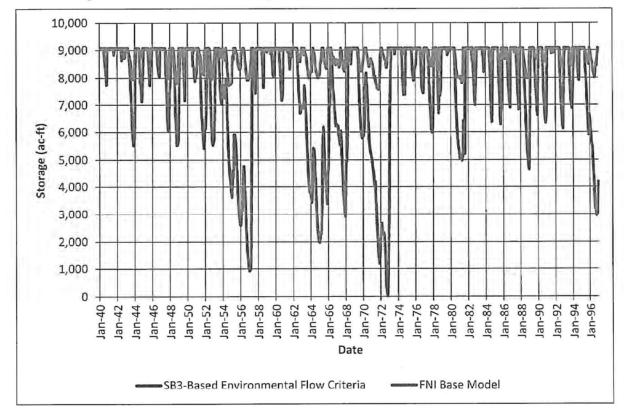


Figure 3-1: Lake Naconiche Storage Trace with and without Proposed Amendment

It is not anticipated that diversion from the lake will have significant impact on the water quality of the lake or downstream water quality. An analysis of the water quality samples at the USGS Gage Attoyac Bayou near Chireno, downstream of Lake Naconiche, indicates good overall water quality as shown in Table 3-1. During periods of low lake levels water quality in the lake may be diminished but the overall quality should remain good.



Table 3-1: USGS Gage Attoyac Bayou near Chireno Water Quality Data

Parameter	Median of Samples
Discharge (cfs)	259
Specific conductance (µs/cm)	110
Dissolved Oxygen (mg/l)	7.0
Total Dissolved Solids (mg/l)	70
рН	7.1

The special conditions of the May 1999 Final Supplemental Environmental Impact Statement (EIS) identified an 852 acre mitigation area to be located in Nacogdoches, Rusk, Shelby and San Augustine Counties. The EIS also identified a separate 176 acres of mitigation area on the perimeter of Lake Naconiche in the May 1998, "Final Monitoring Plan for the Lake Naconiche Created Wetlands" prepared by the Stephen F. Austin School of Forestry. The Final Monitoring Plan included the conversion of 176 acres to hydric soil thereby allowing the development of emergent wetlands along the shoreline of Lake Naconiche. The monitoring of those wetlands has continued since the lake began filling in 2006.

In the Stephen F. Austin School of Forestry 2015 preliminary report, groundwater monitoring results from all years were examined and it was determined that an elevation of 352 feet MSL was an appropriate estimation of where wetlands will be created around the entire perimeter of the lake. The surface area of projected wetlands based on the water table reaching 352 feet MSL around the lake was approximately 188 acres. Vegetation in areas predicted to become wetlands was generally healthy and that there was no difference in vegetation condition along an elevation gradient.

Many seasonal and temporary wetlands experience periods of drought at some point. These wetlands tend to fill during the wetter winter months, dry during the hotter summer months and then refill. This is a natural and common occurrence for wetlands in Texas. In fact, these periods of drying and filling can be beneficial for the development of certain species and promote wetland plant diversity. If low water levels at Lake Naconiche occur for an extended period of time due to the proposed diversion, some wetland plant species dependent on being submerged or inundated might go dormant, or potentially die. Other plant species not dependent on being submerged or inundated would likely survive these periods of low water levels. This is expected since the average annual rainfall in Nacogdoches County is approximately 49 inches (TWDB Quadrangle 613, 1940-2013) which would likely provide the moisture necessary for many wetland plant species to survive within the littoral zone/fringe wetlands of the reservoir once they become established. Figure 3-2 shows the elevation during the longest period where the reservoir is below



the conservation elevation of 348 feet and the corresponding monthly rainfall. This indicates that even during periods of extended drawdown the fringe wetlands will experience rainfall and wetting of soils sufficient to maintain wetland plant species that do not need to be submerged until Lake Naconiche can refill.

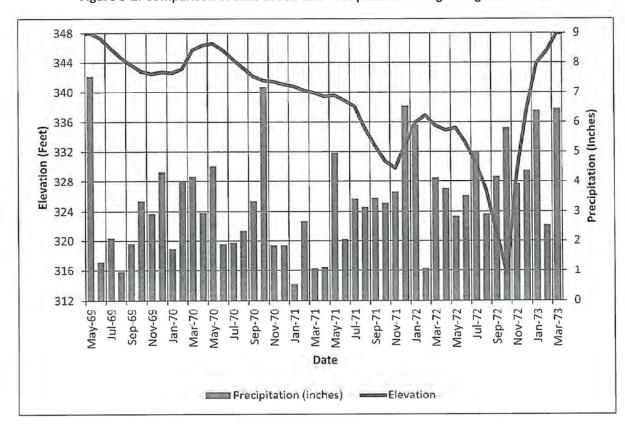


Figure 3-2: Comparison of Lake Levels and Precipitation during Drought of Record



4.0 IMPACTS OF PROPOSED WATER RIGHTS

4.1 NO INJURY ANALYSIS

Potential impacts of the proposed water right on existing water rights were evaluated using the FNI Base Model without the amendment and the project model using the SB3-Based Environmental Flow Criteria. No water rights were impacted by this amendment. Details of the no injury analysis can be found in Appendix B.

4.2 IMPACT ON INSTREAM USES

Because the flow criteria developed for Lake Naconiche are consistent with the SB3 process, the SB3-Based Environmental Flow Criteria should be protective of instream uses.

4.3 IMPACTS ON BAYS AND ESTUARIES

There will be minimal impact on bays and estuaries since diversions will be subject to SB3 instream flow requirements. The annual average regulated flow at the Gulf of Mexico is shown in Table 4-1. The percentage of time for regulated flows at the Gulf of Mexico are shown in Figure 4-1. The change in median annual regulated flows at the Gulf of Mexico is approximately 4,745 acre-feet, a difference of about 0.12%.

Table 4-1: Statistics of Annual Regulated Flows at the Gulf of Mexico

Connecto	Regulated Flow (Acre-feet/Year)			
Scenario	5%	10%	25%	50%
FNI Base WAM	591,881	689,575	1,735,190	4,112,056
SB3 Environmental Flow Criteria WAM	587,796	693,600	1,756,741	4,118,363
Difference from FNI Base WAM	4,085	-4,025	-21,551	-6,307
Percent Difference from FNI Base WAM	0.69%	-0.58%	-1.24%	-0.15%

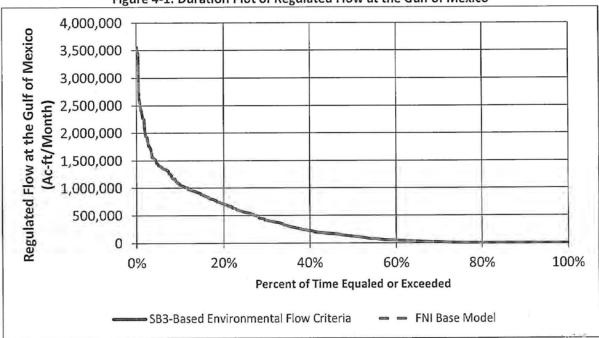


Figure 4-1: Duration Plot of Regulated Flow at the Gulf of Mexico

4.4 IMPACTS ON WETLANDS

The proposed amendment to allow for diversion has slight potential to impact wetland areas along the perimeter of the lake since diversions will lead to increased water level fluctuations. The longest period below the conservation pool is nearly four years which occurs from June 1969 through February 1973 and corresponds with the critical drought. However, due to local precipitation the impacts are expected to be minimal. Further discussion of the potential impact to wetlands is included in Section 3.0.

4.5 WATER CONSERVATION

Nacogdoches County has not been required to submit a water conservation plan in the past since it is not a retail or wholesale water supplier, nor does the existing permit (5585) appropriate 1,000 acre-feet or more of surface water. Nacogdoches County will prepare a water conservation plan in accordance with Chapter 288 rules to be provided to the TCEQ at a later date in conjunction with the proposed amendment.

County of Nacogdoches



4.6 CONSISTENCY WITH REGIONAL WATER PLANS

Lake Naconiche is a recommended strategy in the 2011 Region I Water Plan (Lake Naconiche Regional Water Supply System) for Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC³.

4.7 OTHER POTENTIAL IMPACTS

Since Lake Naconiche is already constructed there will be minimal impacts to water quality, the environment or agricultural resources.

³Alan Plummer and Associates Inc., Freese and Nichols Inc., LBG Guyton and Walker Partners. 2011 Region I Plan, September 2010, pgs. 4C-27-31

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 13, 2016

Mr. Brad B. Castleberry Lloyd Gosselink 816 Congress Avenue, Suite 1900 Austin, Texas 78701

CERTIFIED MAIL
91 7199 9991 7033 2841 8297

RE:

Nacogdoches County

WRPERM 5585

CN601098536, RN103924049

Application No. 5585A to Amend Water Use Permit No. 5585

Texas Water Code § 11.122, Full Basin Mailed and Published Notice

Naconiche Creek, Neches River Basin

Nacogdoches County

Dear Mr. Castleberry:

This acknowledges receipt, on January 21, 2016, of the referenced application and fees in the amount of \$101.25 (Receipt No. M615306, enclosed).

This area is considered to have limited to no water available for appropriation for either a term or perpetual right. TCEQ would probably be unable to recommend granting the application without an alternate source of water.

If an alternate source will be included in the application, please provide documentation for the alternate source such as a signed water supply contract, a contract for reuse of effluent, or groundwater. If groundwater will be used, provide the following information on any well or wells to be used including, but not limited to: the depth of well, the name of the aquifer and formation from which the water is withdrawn, a 24-hour pump test, and water quality information. Water quality information should include, but not be limited to, the following: chloride, sulfate, total dissolved solids (TDS), pH, and temperature. Temperature must be measured on site at the time the groundwater sample is collected.

If data for on-site wells are unavailable, historical data collected from similar-sized wells drawing water from the same aquifer may be provided. However, note that the on-site data may still be required when it becomes available.

Nacogdoches County Application No. 5585A October 13, 2016 Page 2 of 3

Additional information and fees are required before the application can be declared administratively complete.

- 1. Confirm that the application requests to change the instream flow requirement for the existing authorization in Water Use Permit 5855. Section XII on Page 4 of the supplement to the application indicates that the existing special conditions were replaced with "SB3 flow requirements", and the application modeling report discusses an analysis done with both the currently permitted flow restrictions and "SB3-Based Environmental Flow Criteria". However, there is not a specific request to amend the existing instream flow requirement stated in the application.
- 2. Provide electronic copies of all modeling files used in the WAM analysis discussed in the application.
- 3. Confirm the drainage area above the diversion point. Commission records indicate that the drainage area above the dam is 28.07 square miles.
- 4. Provide applicable water conservation plans and drought contingency plans for municipal, industrial, and agricultural uses that comply with Title 30 Texas Administrative Code (TAC) Chapter 288.
- 5. Remit fees in the amount of \$4,963.38, as described below. Please make the check payable to the TCEQ or Texas Commission on Environmental Quality.

Filing Fees (amendment)	\$ 100.00
Recording Fees (\$1.25 x 1 page)	\$ 1.25
Use Fees (\$1.00 x 4,750 acre-feet)	\$ 4,750.00
Notice Fees (Neches Basin)	\$ 213.38
TOTAL FEES	\$ 5,064.63
FEES RECEIVED	\$ 101.25
TOTAL FEES DUE	\$ 4,963.38
Fee Due Prior to Administrative Complete	\$ 2,689.63*
Fees Due 180 Days After Issuance	\$ 2,375.00*

*Pursuant to 30 TAC § 295.133, if the total fee for a permit exceeds \$1,000, the applicant shall pay at least one-half of the use fees when the application is filed, and one-half within 180 days after notice is mailed to the applicant that the permit is granted. If the applicant does not pay the entire amount owed before beginning to use state water under the permit, the permit is annulled and reverts to the status of a pending, filed application requiring notice, the payment of notice fees, and the balance of the use fees.

Please submit the requested information and fees by **November 14, 2016** or the application may be returned pursuant to Title 30 TAC § 281.18.

Nacogdoches County Application No. 5585A October 13, 2016 Page 3 of 3

Please be aware that the amendment request to add uses to Water Use Permit No. 5585 may result in annual Water Use Assessment Fees (WUF). For more detailed information on these fees, see the enclosed *Frequently Asked Questions* fact sheet or contact the Water Quality Monitoring & Assessment Section at (512) 239-3838.

If you have questions concerning this application, please contact **Olivia Ybarra** at olivia.ybarra@tceq.texas.gov or by phone at (512) 239-5896.

Sincerely,

Olivia Ybarra, Project Manager Water Rights Permitting Team

in Man

Water Rights Permitting and Availability Section

Enclosures

Water Use Assessment Fee (WUF): The Annual Fee Associated with Water Rights Permits

How can this affect me?

You are receiving this notice if you are the owner of a water right permit and you have recently changed your permit. Any change to your permit, including adding an authorized use, changing a diversion point, or a change of ownership, would cause the Water Use Fee assessor to review your permit for billable uses and may (depending on the change) result in you receiving a bill when you previously did not.

What is this fee?

The Water Use Assessment Fee is a fee that is assessed annually on applicable water rights permits. Texas Water Code, Sections 26.0135 & 26.0291 authorizes the TCEQ to establish fees to recover the reasonable costs of water quality assessment programs from wastewater and water right permit holders. TCEQ rules, 30 Texas Administrative Code (TAC), Sections 21.1-21.4, set out the methodology for assessing water use fees, described below.

Why are you billed?

If you hold a water right and do not fall under an exemption, then you are subject to the Water Use Assessment Fee. Unless the water right is amended to fall under an exemption, you will be billed for this water right on an annual basis.

Amendments can make a water right that was not previously billed now billable. For example, if you amend your water right to add an authorized use you could receive a bill in the year following your amendment.

What are reasons for exemption?

Exemptions are listed in 30 TAC, Section 21.3(c). Exemptions from the Water Use Assessment Fee include: municipal/domestic or industrial water rights directly associated with a facility that is assessed a Consolidated Water Quality Fee; agriculture (irrigation) water rights; non-priority hydroelectric water rights for a facility with a capacity of less than 2 megawatts; consumptive authorization less than 250 acre-feet; and non-consumptive authorization less than 2,500 acre-feet. If you can provide proof of these exemptions, please contact us using the information at the end of this document.

How is the fee assessed?

Fees are based on the annual authorization in the water right, not actual use. The total fee is the sum of the separate fees for each authorized use in each of the following categories for each permit.

The fee rate of **\$0.385** per acre-foot per year applies to authorized consumptive use (municipal/domestic, industrial, or mining purposes) if the specified limit is more than 250 acre-feet per year.

The fee rate of **\$0.021** per acre-foot per year applies to authorized non-consumptive use (including hydroelectric and some recreation) if the specified limit is more than **2,500** acrefeet per year.

The maximum water use fee for a single permit is \$115,000, which may be adjusted annually using the latest Consumer Price Index.

How are diversion amounts distributed amongst uses?

For permits with multiple uses that do not specify the amount per use, the total authorized amount is divided equally among all uses.

Example: 10,000 ac-ft for irrigation, municipal, industrial, and mining

10,000/4 = 2,500 ac-ft per use

Irrigation is exempt; municipal/domestic not billed because wastewater treatment plant that uses the water already pays the Consolidated Water Quality Fee; industrial is billed \$962.50 at the consumptive rate for 2,500 ac-ft; mining billed \$962.50 at the consumptive rate for 2,500 ac-ft.

Where Do I Get More Information?

For copies of the fee rules (30 TAC, Sections 21.1-21.4), refer to the TCEQ rules from the Texas Administrative Code on the Secretary of State's web site at www.sos.state.tx.us. To learn more about the fee, please visit:

http://www.tceq.state.tx.us/agency/drought/waterfees.html

For billing and account balance information, call the TCEQ's Financial Administration Division, Revenue Section at (512) 239-0344.

If you have any questions about the Water Use Assessment Fee or the rates for your water right, contact the Water Quality Monitoring & Assessment Section at (512) 239-3838, or via email at wateruse@tceq.texas.gov, or write to:

Texas Commission on Environmental Quality Water Quality Planning Division, MC 234 Water Use Fees P.O. Box 13087 Austin, TX 78711-3087

TCEQ - A/R RECEIPT REPORT BY ACCOUNT NUMBER

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SECTION 1 TCEQ Water Right Application



Texas Commission on Environmental Quality PO Box 13087, MC-160, Austin, Texas 78711-3087

Telephone (512) 239-4691, FAX (512) 239-4770

APPLICATION FOR AMENDMENT TO A WATER RIGHT

Note:	If you do not have a Customer Reference Number, complete Section It of the Core Data Form (TCEO-10400) and submit it with this conflict	ina

Notice: of the A Protoc	: This form will not be processed until all delinquent fees and/or penalties owed to the T Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee a ol.	CEQ or the Office and Penalty	
Custon	ner Reference Number (if issued): <u>CN601098536</u>		
Note: If	you do not have a Customer Reference Number, complete Section It of the Core Data Form (TCEQ-10400) and submit	I II with this application.	
1.	Name: Nacogdoches County		
	Address: 101 West Main Street		
	Nacogdoches, Texas 75961		
	Phone Number: (936) 560-7755 Fax Number: (936) 560-7841		
	Email Address:		
2.	Applicant owes fees or penalties?	enalty as well as any identifying numbers on No	
	TYes PNo	Francis,	
	If yes, provide the amount and the nature of the fee or penalty as well as any identifying numb	- willy	
		FT - mm	
3.	Permit No. <u>5585</u> Certificate of Adjudication No	11.0	
	Stream: Naconiche Creek Watershed: Neches	183	
	Reservoir (present condition, if one exists): Lake Naconiche (Good)		
i .		Profession ()	
	Amend water right to add municipal, agricultural, and industrial purposes of use. Also amend	Water right to add a	
	(Attach additional page as necessary, attach map/plat depicting project location, diversion point, place of use, and other	annual basis. er perlinent data).	
5 .	Lunderstand the Agency may require additional information in regard to the requested amenda considering this application.		
(50(3)		
	Name (sign) Name (sign)		
	The state of the s		
,	Mike Perry Nacogdothes County Judge		
,	Name (print)	****	
	WELL IN		
	Subscribed and sworn to me as being true and correct before me thisday of)f	
	20 J		
	The proportion of the second second	,	
6	BILLIE TILLIS Notary Public, State of Texas		
Town Tron	ar Commission Expired		
onn (Ch	EQ-10201 (revised 20010) April 20 Day 6		

SECTION 2

Supplement to Water Right Application

SUPPLEMENT TO APPLICATION TO AMEND WATER USE PERMIT NO. 5585 NACOGDOCHES COUNTY, TEXAS

PURSUANT TO TEXAS WATER CODE §§ 11,122

In addition to the TCEQ Application Form (Form 10201) (the "Application"), a narrative description of the amendment sought by this Application is provided below. The following documents are also attached as Exhibits to this Application:

- 1. Application fee
- 2. Supplement to Application Prepared by Freese & Nichols, which includes a Vicinity Map, USGS Topographic Map, and Water Use Permit No. 5585
- 3. Resolution Authorizing Filing of Application
- 4. Diversion Point Information Sheet
- 5. Supplemental Dam/Reservoir Information Sheet

I. Background Information

Nacogdoches County (the "County") owns Water Use Permit No. 5585 (the "Permit"), which authorizes storage of up to 9,072 acre-feet of water for flood control and recreational purposes. A copy of the Permit is attached hereto in Exhibit 2, Appendix C.

Pursuant to Section 11.122 of the Texas Water Code, the County hereby seeks to amend the Permit to add municipal, agricultural, and industrial purposes of use. The County also seeks to amend the Permit to add a diversion point anywhere along the perimeter of Lake Naconiche for diversion of up to 4,750 acre-feet of water on an annual basis.

On April 14, 2015, the County adopted a resolution authorizing the filing of this Application. A copy of the County's resolution is attached hereto as Exhibit 3.

II. Applicant Information

Name of Applicant:

Nacogdoches County

Address:

101 W. Main Street, Suite 101, Nacogdoches, TX 75961

Principal Contact:

Honorable Mike Perry

Telephone:

(936) 560-7755

Fax:

(936) 560-7841

III. Source of Supply

The source of water associated with the Application is Naconiche Creek.

IV. Amount and Purpose of Diversion and Use

The County seeks to amend the Permit to add municipal, industrial, and agricultural purposes of use. The City also seeks to add a diversion point on the perimeter of Lake Naconiche for diversion of up to 4,750 acre-feet of water annually. A vicinity map and USGS topographic map are attached as Exhibit 2, Figure 1-1 and Appendix A, respectively.

V. <u>Diversion Information</u>

The County seeks to add a diversion point anywhere along the perimeter of Lake Naconiche. Exhibit 4 contains the Supplemental Diversion Point Information Sheet for the diversion sought by this Application. A vicinity map and USGS topographic map are attached as Exhibit 2, Figure 1-1 and Appendix A, respectively.

VI. Water Conservation and Drought Contingency and Avoidance of Waste

As defined in both 30 TAC §295.9 and Texas Water Code §11.002(8), "conservation" means those practices that will "reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses." (emphasis added). The County has an acute awareness of the need to conserve its water supplies. By amending the Permit to allow the County to utilize the full 9,067 acre-feet impoundment for the additional municipal, agricultural, and industrial purposes of use, the County will have the flexibility to more efficiently utilize its water supplies. Such efficiency will allow the County to address its water supply needs in a manner that will allow it to avoid waste, maximize its beneficial use of water, and achieve water conservation.

VII. Administrative Requirements and Fees

The Application provides relevant information to address the administrative requirements of 30 TAC §295, Subchapter A and the requirements of Texas Water Code Chapter 11. In accordance with 30 TAC §295.131 and other TCEQ rules relating to fees, the County is submitting payment of \$101.25 with this Application attached hereto as Exhibit 1. With the filing of this Application, the County requests a determination of any additional fees that may be required. Upon receipt of such determination, the County will forward such fees to the TCEQ.

VIII. Beneficial Use

Texas Water Code §11.134(b)(3)(A) requires that proposed appropriations of water be intended for a beneficial use. The "beneficial use" of water is defined in Texas Water Code §11.002(4) and 30 TAC §297.1(8) as the use of water "which is economically necessary for a purpose authorized by [Chapter 11 of the Texas Water Code]."

A "municipal" purpose of use is identified in Texas Water Code § 11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC § 297.1(32) to include "the use of potable water within a community or municipality and its environs for domestic, recreation, commercial, or industrial purposes or for the water of golf courses, parks and parkways, or the use of reclaimed water in lieu of potable water for the preceding purposes."

An "agricultural" purpose of use is identified in Texas Water Code § 11.023 as a purpose for which water may be diverted and beneficially used and is defined in TAC § 297.1(2) as "any use or activity involving agriculture, including irrigation," with "agriculture" being further defined under 30 TAC § 297.1(1).

An "industrial" purpose of use is also identified in Texas Water Code § 11.023 as a purpose for which water may be diverted and beneficially used and is defined in 30 TAC § 297.1(24) to include "the use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, including the development of power by means other than hydroelectric, but does not include agricultural use."

IX. Public Welfare

The proposed amendment will allow the County to provide water for beneficial use, as defined by the Texas Water Code. Such action is not detrimental to the public welfare. Indeed, the proposed amendment will benefit the public welfare as it will improve the County's abilities to more efficiently utilize existing water supplies to address multiple demands for water, specifically municipal, agricultural, and industrial demands for water.

The proposed amendment will not result in environmental impacts or impacts on environmental flow standards. The proposed addition of municipal, agricultural, and industrial purposes of use will not result in the diversion or consumption of any additional water supplies, but will allow the County to make the most efficient use of existing water supplies. As such, the proposed amendment is not detrimental to the public welfare.

X. Consistency with State and Regional Water Plans

The County is located within the Region I Water Planning Group. According to the State Water Plan, Water for Texas 2012, the population in Region I is expected to increase by thirty six percent (36%) from 2010 to 2060. The State Water Plan indicates a current and future demand for Region I for municipal, agricultural and industrial uses. Additionally, the Region I Water Plan includes a recommendation for development of Lake Naconiche as a source of water supply for the region and rural communities. Therefore, adding these purposes of use to the 9,072 acre-feet currently authorized for flood control and recreational purposes is consistent with the State and Regional water plans because it will provide the County flexibility to meet regional demands.

https://www.twdb.texas.gov/waterplanning/rwp/plans/2011/I/Region I 2011 RWP.pdf

¹ Texas Water Development Board, Water for Texas 2012: Summary of Region I, pg. 81 (January 2012), available at http://www.twdb.texas.gov/publications/state_water_plan/2012/2012 SWP.pdf.

² *Id.* at pg. 82. ³ *Id.* at pg. 82-83.

⁴ Region I Water Planning Group, Regional Water Plan for Region I, Chapter 4C: Water Management Strategies for Entities with an Identified Need, pg. 4C-27 available at

XI. Groundwater Assessment

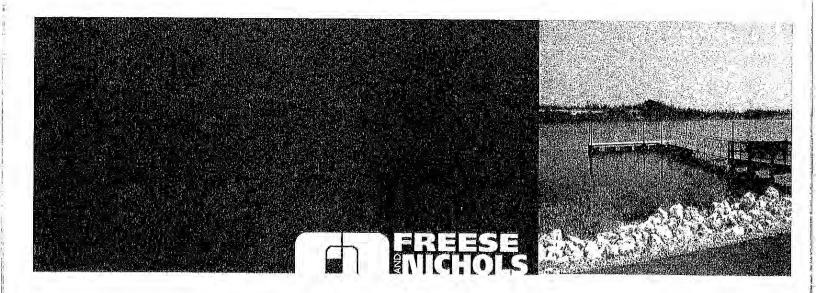
No adverse impact to groundwater resources will result from the Application. The County is seeking to add municipal, agricultural, and industrial purposes of use to the Permit. The County is also seeking to add a diversion point on the perimeter of Lake Naconiche to divert up to 4,750 acre-feet of water on an annual basis. Because the Application seeks to use only surface water, there is no impact to groundwater resources.

XII. Impacts on Other Water Rights Holders or the Environment

The diversion point sought by this Application will have a minimal impact on other water rights users because the diversion impacts the period and volume reliability by only seven percent (7%). Additionally, only one water right holder, Permit 5629, will be impacted by the diversion point. The Application will also have minimal impact on the environment. For a full discussion of impacts to other water rights holders please see Exhibit 2, Section 4. See also Exhibit 2, Section 4.2 as well as Exhibit 6 to support the County's request to remove Special Condition Nos. 4(c) and 4(d) of the Permit and replace them with the SB3 flow requirements adopted in 30 TAC §298, Subchapter C.

EXHIBIT 2

Supplement to Application Prepared by Freese & Nichols, which includes a Vicinity Map, USGS Topographic Map, and Water Use Permit No. 5585



SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE

Prepared for:

County of Nacogdoches

June 2015

Prepared by:

FREESE AND NICHOLS, INC.
4055 International Plaza, Suite 200
Fort Worth, Texas 76109
817-735-7300

SUPPLEMENT TO APPLICATION FOR WATER RIGHT AMENDMENT FOR DIVERSION FROM LAKE NACONICHE



FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144

Jeremy Rice, Hydrologist

Prepared by:

FREESE AND NICHOLS, INC. 4055 International Plaza, Suite 200 Fort Worth, Texas 76109 817-735-7300

LGB14501



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Table 4-1: Statistics of Annual Regulated Flows at the Gulf of Mexico	

APPENDICES

APPENDIX A- USGS 7.5 Minute Topographic Map APPENDIX B – WAM Modeling and No Injury Analysis APPENDIX C – Existing Water Right Permit 5585



1.0 DESCRIPTION OF THE PROJECT

1.1 LAKE NACONICHE DESCRIPTION

Lake Naconiche is located in northeast Nacogdoches County and is authorized under Permit/Application 5585 to impound 9,072 acre-feet at elevation 348 feet msl for flood control and recreational purposes¹. Lake Naconiche is impounded by Attoyac Bayou WS NRCS Site 23A Dam. The dam is an earth fill dam with a length of 1,605 feet and a maximum height of 59 feet². The elevation at the top of dam is 365 feet with a total storage of 27,225 acre-feet². The dam construction was completed in 2006. Table 1-1 shows the elevation, capacity, and area for Lake Naconiche. Figure 1-1 is a location map showing Lake Naconiche.

Table 1-1: Elevation, Storage and Area Relationships for Lake Naconiche

Elevation (feet-msl)	Capacity (acre-feet)	Area (acre)
312	0	0
316	24	12
320	118	35
324	346	79
324.2	361	83
328	812	154
332	1,644	262
338	2,884	358
340	4,510	455
344	6,554	567
*348	9,072	692
352	12,100	856
**355	15,031	1,003
356	15,966	1,055
360	20,544	1,236
364	25,842	1,453
***365	27,225	1,512

^{*}Normal pool elevation

^{**}Emergency spillway elevation

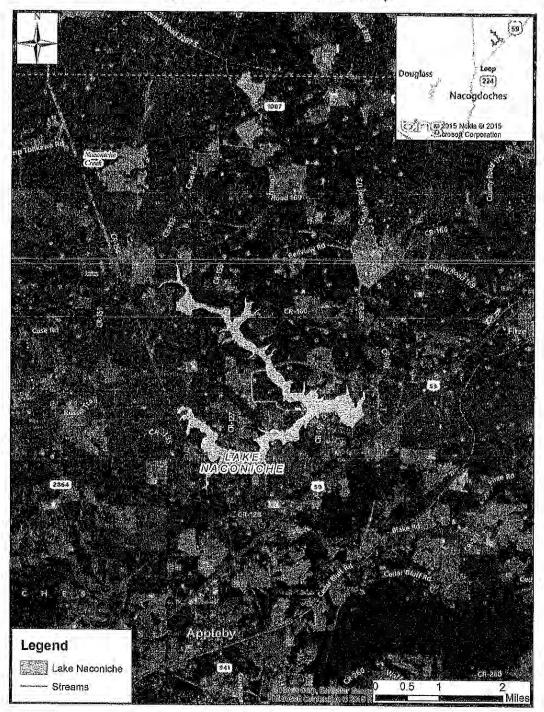
^{***}Top of dam elevation

¹ Texas Natural Resource Conservation Commission. Water Right Permit Number 5585, July 3, 1998.

² Texas Commission on Environmental Quality, State Inventory of Dams, November 2007.



Figure 1-1: Lake Naconiche Location Map





1.2 PROPOSED AMENDMENT FOR DIVERSION

Lake Naconiche is currently being operated for flood control and recreational purposes. The proposed amendment would authorize diversion of 4,750 acre-feet per year for multi-purpose use from the perimeter of Lake Naconiche. The demand pattern used in the modeling was based on the municipal pattern (UMUN) in the Neches WAM identified in Appendix B.

The proposed amendment is a recommended project in the 2011 Region I Water Plan and the 2012 State Water Plan. Based on the regional water plan the potential customers include Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC in Nacogdoches County.



2.0 WATER AVAILABILITY ANALYSIS

2.1 FNI BASE MODEL

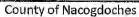
FNI obtained the Neches River Water Availability Model, Full Authorization Scenario (TCEQ WAM) from the Texas Commission on Environmental Quality (TCEQ) on September 8, 2014. The TCEQ Neches WAM contains SB3 environmental flows. Figure 2-1 shows the locations of the SB3 measurement points. Based upon an initial review of the TCEQ model, FNI identified two changes which are incorporated into the FNI Base Model used for all of the model runs:

 The TCEQ WAM had an annual instream flow target of 57,196 acre-feet per year for Lake Naconiche. This is substantially higher than the amount in the permit, which corresponds to 4,744 acre-feet per year. The instream target along with the UC record were changed in the FNI Base Model to match the permit instream flow requirements as shown in Table 2-1.

Table 2-1: Instream Flow Requirements Authorized by Permit Number 5585

		Acre-
Month	cfs	feet
January	8	492
February	12	666
March	15	922
April	11	655
May	9	553
June	4	238
July	3	184
August	3	184
September	3	179
October	3	184
November	3	179
December	5	307
Annual		4,744

2. The TCEQ WAM includes subordination of Lake Sam Rayburn for all junior municipal water rights, and water rights upstream of the proposed Ponta Dam on the Angelina River and the proposed Weches Dam on the Neches River, including Lake Naconiche. The subordination method employed in the model excludes not only Sam Rayburn from making priority calls from upstream



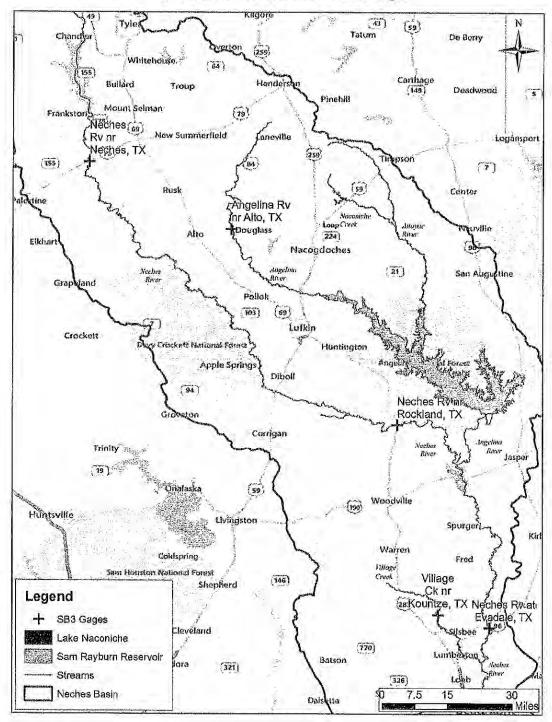


water rights, but also all water rights below Sam Rayburn do not make priority calls. For Lake Naconiche, the subordination method was changed so that any streamflow made available through subordination was limited to the depletions made at the Lake Sam Rayburn control point. This method is slightly more conservative than the one used in the TCEQ WAM. The method still excludes consideration of flows below Lake Sam Rayburn.

In addition to the above modifications, a new water right was added to model the new diversion authorization at a priority date of 2016.



Figure 2-1: Neches River Basin and SB3 Gages





2.2 SB3-BASED ENVIRONMENTAL FLOWS

The only SB3 measurement point that is downstream of Lake Naconiche is the Neches River at Evadale, which is below Sam Rayburn. During the analysis FNI determined that the Lake Sam Rayburn subordination resulted in the SB3 environmental flows not being applied at Lake Naconiche. In order to apply SB3 environmental flows at Lake Naconiche, FNI developed SB3-Based Environmental Flow Criteria using the SB3 criteria at the Angelina River near Alto gage. Table 2-2 shows the base flow and subsistence environmental flow criteria for the Angelina River near Alto gage.

Table 2-2: Angelina River near Alto Base and Subsistence Flow Conditions

		Flow	in cfs	
	Winter	Spring	Summer	Fall
Subsistence	55	18	11	16
Base	277	90	40	52

Lake Naconiche has a drainage area of 28 square miles in the WAM. The drainage area at the Angelina River near Alto gage according to USGS is 1,276 square miles. The ratio of the drainage areas is 0.022. The base and subsistence flows in Table 2-2 were multiplied by the drainage area ratio to determine the base and subsistence flows for the SB3-Based Environmental Flow Criteria at Lake Naconiche, shown in Table 2-3. These environmental flows were applied at the lake at the 1997 priority date of the original storage authorization.

Table 2-3: SB3-Based Environmental Flow Criteria for Base and Subsistence Flow Conditions

		Flow	in cfs	
	Winter	Spring	Summer	Fall
Subsistence	1.2	0.4	0.2	0.4
Base	6.1	2.0	0.9	1.1

According to TAC 298.285 it is not necessary for water rights which store or divert less than 10,000 acrefeet per year to preserve or pass high flow pulses. Since Lake Naconiche stores less than 10,000 acrefeet and the new authorization will be less than 10,000 acrefeet per year only base and subsistence criteria were incorporated into the SB3-Based Environmental Flow Criteria.



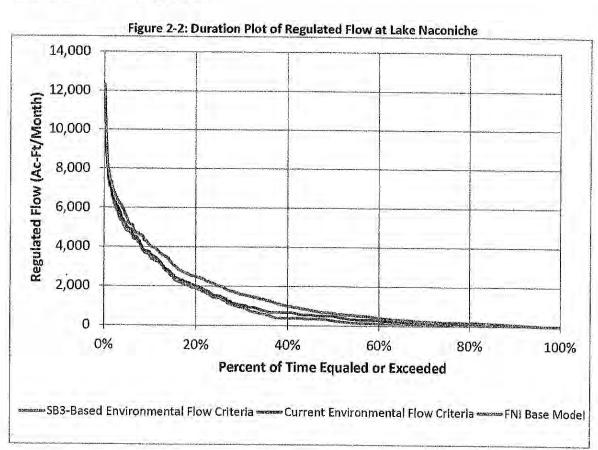
2.3 RESULTS

The yield using the FNI Base Model with the environmental flows in the current permit and with the SB3-Based Environmental Flow Criteria are shown in Table 2-4. The yields using the SB3-Based Environmental Flow Criteria are greater than the yield using the existing environmental flows because the SB3-based criteria are less than those found in the existing permit.

Table 2-4: Lake Naconiche Yield with Environmental Flow Criteria from Current Permit and SB3-Based Environmental Flow Criteria

Scenario	Yield (Acre-feet/Year)
Current Environmental Flow Criteria	3,160
SB3-Based Environmental Flow Criteria	4,750

Figure 2-2 compares the range of regulated flows just downstream of Lake Naconiche from the FNI Base Model without the new authorization to the flows with the new diversion using the two different approaches to environmental flows. As shown on this graph, there is little difference in the regulated flows between the two approaches.





3.0 AFFECTED ENVIRONMENT

The use of Lake Naconiche as a water supply source as opposed to a recreational lake will have some impact on the aquatic habitat within the lake. This is shown in Figure 3-1 by comparing the storage trace from the FNI Base model and the proposed diversion of 4,750 acre-feet per year with the SB3-Based Environmental Flow Criteria. It is not anticipated that the proposed diversion will impact the downstream aquatic environment since those flows are protected by environmental flow criteria. The fluctuation in lake levels will have some impact on the use of Lake Naconiche for recreation.

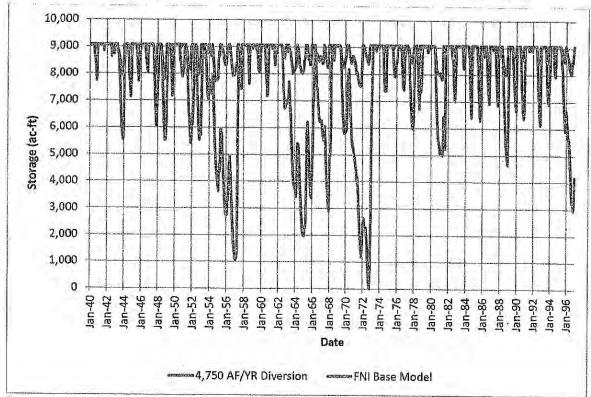


Figure 3-1: Lake Naconiche Storage Trace with and without Proposed Amendment

It is not anticipated that diversion from the lake will have significant impact on the water quality of the lake or downstream water quality. An analysis of the water quality samples at the USGS Gage Attoyac Bayou near Chireno, downstream of Lake Naconiche, indicates good overall water quality as shown in Table 3-1. During periods of low lake levels water quality in the lake may be diminished but the overall quality should remain good.



Table 3-1: USGS Gage Attoyac Bayou near Chireno Water Quality Data

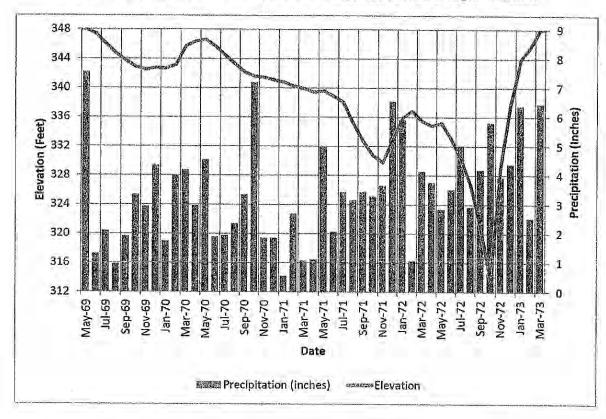
Parameter	Median of
Discharge (cfs)	Samples 259
Specific conductance (μs/cm)	110
Dissolved Oxygen (mg/l)	7.0
Total Dissolved Solids (mg/l)	70
pH	7.1

The special conditions of the May 1999 Final Supplemental Environmental Impact Statement (EIS) identified an 852 acre mitigation area to be located in Nacogdoches, Rusk, Shelby and San Augustine Counties. The EIS also identified a separate 176 acres of mitigation area on the perimeter of Lake Naconiche in the May 1998, "Final Monitoring Plan for the Lake Naconiche Created Wetlands" prepared by the Stephen F. Austin School of Forestry. The Final Monitoring Plan included the conversion of 176 acres to hydric soil thereby allowing the development of emergent wetlands along the shoreline of Lake Naconiche. The monitoring of those wetlands has continued since the lake began filling in 2006.

Many seasonal and temporary wetlands experience periods of drought at some point. These wetlands tend to fill during the wetter winter months, dry during the hotter summer months and then refill. This is a natural and common occurrence for wetlands in Texas. In fact, these periods of drying and filling can be beneficial for the development of certain species and promote wetland plant diversity. If low water levels at Lake Naconiche occur for an extended period of time due to the proposed diversion, some wetland plant species dependent on being submerged or inundated might go dormant, or potentially die. Other plant species not dependent on being submerged or inundated would likely survive these periods of low water levels. This is expected since the average annual rainfall in Nacogdoches County is approximately 49 inches (TWDB Quadrangle 613, 1940-2013) which would likely provide the moisture necessary for many wetland plant species to survive within the littoral zone/fringe wetlands of the reservoir once they become established. Figure 3-2 shows the elevation during the longest period where the reservoir is below the conservation elevation of 348 feet and the corresponding monthly rainfall. This indicates that even during periods of extended drawdown the fringe wetlands will experience rainfall and wetting of soils sufficient to maintain wetland plant species that do not need to be submerged until Lake Naconiche can refill.



Figure 3-2: Comparison of Lake Levels and Precipitation during Drought of Record





4.0 IMPACTS OF PROPOSED WATER RIGHTS

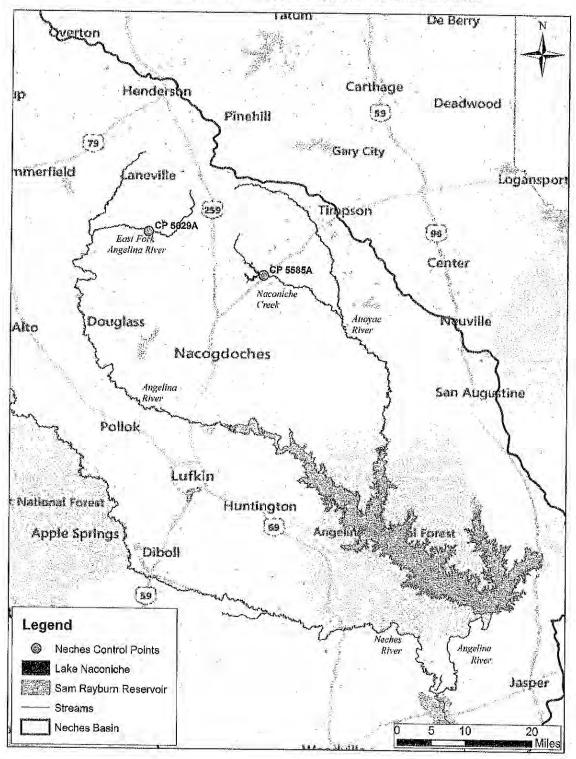
4.1 NO INJURY ANALYSIS

Potential impacts of the proposed water right on existing water rights were evaluated using the FNI Base Model without the amendment and the model using the SB3-Based Environmental Flow Criteria. Permit 5629 is the only water right shown by the model to be impacted by the amendment with an increase in the mean shortage of less than 2 acre-feet per year (increases from 9.8 acre-feet per year to 11.5 acre-feet per year). The amendment also is shown to impact the period and volume reliability of this right by approximately two percent. The impacted water right is an irrigation water right for diversion of 105 acre-feet per year from the East Fork of the Angelina River with an off-channel reservoir. The priority date of Permit 5629 is October 2, 1999, which is junior to the existing Lake Naconiche authorization.

Based on our review of the modeling results, the apparent impact on Permit 5629 is a function of the operation of the model under dual simulation with subordination of Lake Sam Rayburn rather than a true impact to the water right. The regulated flows at CP5629A, which is the diversion location for Permit 5629, are impacted by the subordination modeling for Lake Sam Rayburn. Due to the special conditions in Permit 5629, the minor change in regulated flows (two months during the simulation, a total of 110 acre-feet) causes the increased shortages (11 months during the simulation, a total of 96 acre-feet). This appears to be a modeling artefact caused by a combination of small changes in available flow and the monthly and annual limits associated with filling the storage associated with Permit 5629, and exacerbated by the second simulation limitations imposed in the dual simulation modeling. Authorizations for Permit 5629 are upstream of Lake Sam Rayburn as shown in Figure 4-1 within the Angelina River watershed. Lake Naconiche is in the Attoyac River watershed and is not hydrologically connected to the Angelina River watershed. As a result, Permit 5629 should not be impacted by the proposed amendment.



Figure 4-1: Location of Permit 5629 in Relation to Lake Naconiche





4.2 IMPACT ON INSTREAM USES

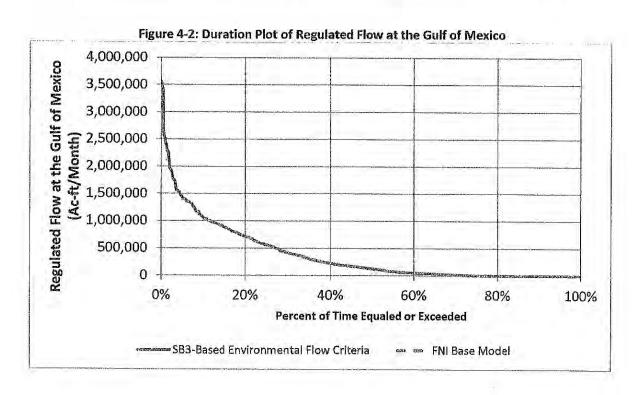
Because the flow criteria developed for Lake Naconiche are consistent with the SB3 process, the SB3-Based Environmental Flow Criteria should be protective of instream uses.

4.3 IMPACTS ON BAYS AND ESTUARIES

There will be minimal impact on bays and estuaries since diversions will be subject to SB3 instream flow requirements. The annual average regulated flow at the Gulf of Mexico is shown in Table 4-1, The percentage of time for regulated flows at the Gulf of Mexico are shown in Figure 4-1. The change in median annual regulated flows at the Gulf of Mexico is approximately 4,745 acre-feet, a difference of about 0.12%.

Table 4-1: Statistics of Annual Regulated Flows at the Gulf of Mexico

Scenario Regulated Flow (Acre-feet/Year)					
ocerrano	5%	10%	25%	50%	
FNI Base WAM	591,881	689,575	1,735,190	4,112,056	
SB3 Environmental Flow Criteria WAM	591,241	689,575	1,729,977	4,107,311	
Difference from FNI Base WAM	640	0	5,213	4,745	
Percent Difference from FNI Base WAM	0.11%	0.00%	0,30%	0.12%	





4.4 IMPACTS ON WETLANDS

The proposed amendment to allow for diversion has slight potential to impact wetland areas along the perimeter of the lake since diversions will lead to increased water level fluctuations. The longest period below the conservation pool is nearly four years which occurs from June 1969 through February 1973 and corresponds with the critical drought. However, due to local precipitation the impacts are expected to be minimal. Further discussion of the potential impact to wetlands is included in Section 3.0.

4.5 WATER CONSERVATION

Nacogdoches County has not been required to submit a water conservation plan in the past since it is not a retail or wholesale water supplier, nor does the existing permit (5585) appropriate 1,000 acre-feet or more of surface water. Nacogdoches County will prepare a water conservation plan in accordance with Chapter 288 rules to be provided to the TCEQ at a later date in conjunction with the proposed amendment.

4.6 CONSISTENCY WITH REGIONAL WATER PLANS

Lake Naconiche is a recommended strategy in the 2011 Region I Water Plan (Lake Naconiche Regional Water Supply System) for Nacogdoches County-Other, Appleby WSC, Lily Grove WSC and Swift WSC³.

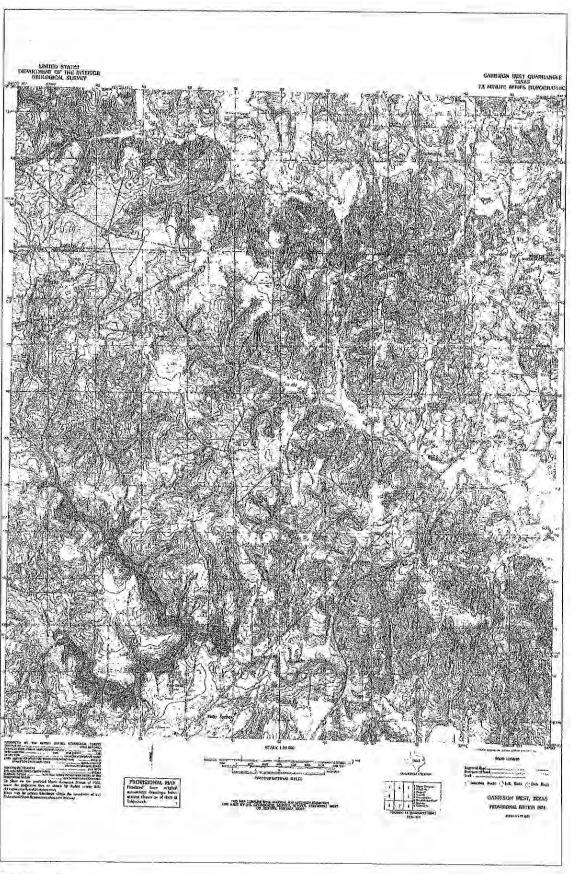
4.7 OTHER POTENTIAL IMPACTS

Since Lake Naconiche is already constructed there will be minimal impacts to water quality, the environment or agricultural resources.

³Alan Plummer and Associates Inc., Freese and Nichols Inc., LBG Guyton and Walker Partners. 2011 Region I Plan, September 2010, pgs. 4C-27-31



Appendix A USGS 7.5 Minute Topographic Map



0 1,000 2,000 4,000 Feel



Lako Naconiche

County of Hacogdoeline 101 West Main Street Nacogdoches, Texas 76951 Nacogdoches County, Texas



Appendix B WAM Modeling and No Injury Analysis



Modifications to the Neches River WAM

The analyses in this water right application are based on the October 2012 version of the Neches River WAM, full authorization scenario and including Senate Bill 3 instream flow requirements, using the August 2013 version of WRAP-SIM. (WRAP-SIM is the computer program used to run the WAM.).

Base WAM Changes

```
** FNI Change - Changed to match the pattern in the permit
UCUT5585
             492
                     666
                             922
                                      655
                                             553
                                                     238
             184
                     184
                             179
                                     184
                                             179
                                                     307
**UCUT5585
             0.101
                     0.152
                             0.190
                                     0.139
                                             0.114
                                                     0.051
             0.038
                     0.038
                             0.038
                                    0.038
                                             0.038
                                                     0.063
** FNI Change - Changed to match IF requirement in the permit
**IF 5585A 57196 UT558519970430
                                         1
                                                            5585N1
IF 5585A
            4744 UT558519970430
                                       1
                                                          5585N1
** changing from type 1 to type 2 subordination (limit to depletions)
WR 5585A
              0
                     REC19970430
                                  1
                                                                          5585R1
                                                                                     5585
WSNACKNK
            9072
**PX
        2
                        1 4411A1
      2
PX
                       2 4411A1
```

The following records were added to the neches3.dat file.

```
** FNI change - pattern for new base eflow at lake Naconiche
OC nksub
           74
                  63
                         74
                                24
                                       24
                                                         397
UC
           15
                  15
                         14
                                22
                                       21
                                             22
UC nkbas
           375
                  341
                        375
                               118
                                      122
                                             118
                                                         1817
UC
           54
                  54
                         52
                                70
                                       68
                                              70
** FNI change - add control point for subsistence calculations for Lake Naconiche
           ATCH
                                  7
CP 5585A nksubs
                                 7
CPnksubs
          ATCH
                                 7
                                           5585A
**FNI change dummy CPs for Lake Naconiche
CPfknk02
          OUT
                                     NONE
                                            NONE
CPfknk03
          OUT
                                 2
                                     NONE
                                            NONE
** FNI change - fake CPs associated with Lake Naconiche SB3 instream flows
CI
** FNI Change - Changed to match IF requirement in the permit
****IF 5585A 57196 UT558519970430
                                                    5585N1
                                    1
           4744 UT558519970430
                                  1
                                                   5585N1
** FNI change - add instream flow based on Alto multiplied by DA ratio. Giving everything a priority
junior to SB3
    only base flows apply since diversion or storage is less than 10,000
** Subsistence flow at CP just downstream of reservoir
   giving it priority date of original certificate.
IFnksubs
         397 nksub19970430
                                               nksubsis
   Regulated flow - for checking
WRfknk02
                    19970430
                                                              nklook
                                                                       5585
TO
                 ADD
                                    5585A
  Holds the monthly target
WRfknk02
         1817 nkbas19970430
                                                           holdnkbase
                                                                       5585
** Ratio of target to regulated flow
WREknk03
               nkbas19970430
                                                             nkOnOff
                                                                       5585
```

Nacogdoches County



```
TO 2
TO 6
                  ADD
                                      5585A
                                                                    CONT
                  DIV
                                                      holdnkbase
** Flow switch based on ratio calculated above.
                                            Applied if > 1
IF 5585A 1817 nkbas19970430
                                                   nkbase
FS 5 fknk03
                         0
                   1
                                   1 9999999
    Original authorization.
WR 5585A
WSNACKNK
          0 REC19970430 1
9072 4
                                                                  5585R1
                                                                           5585
**PX 2
                      1 4411A1
                    2 4411A1
**PX
       3
** FNI Change - New WR to calculate yield
WR 5585A 4750 UMUN20160000 1
                                                                  5585FY
                                                                           5585
WSNACKNK
          9072
PX 2
                   2 4411A1
** end FNI change
    FNI comment - keeping only in second simulation - mass balance not as important in the first
simulation
**WR4411A1
                     20091129
                                                               BURAYBUR14
                                                                           4411
                                                                                   5585
**WSRAYBRN 2898200
**BU 0 0
                      5585R1
**PX
** FNI change - change to reference firm yield
WR4411A1
                     99999999
                                                           BURAYBUR14fy
                                                                          4411
                                                                                 5585
WSRAYBRN 2898200
BH
      0
            0
                     5585FY
PX
      2
**
```

The following records were added to the neches3.dis file.

```
** FNI change
FDnksubs ATCH 0

**

** FNI change
WPnksubs 28.07 42 46
```

No changes were made to the other input files.



The impact analysis for the diversion from Lake Naconiche, modeled as described above, impacts only one water right in the Neches WAM (Table B-1). Table B-1 shows the difference between the FNI Base WAM model run and the modified WAM for all water rights in the October 2012 version of the Neches River WAM. The impacted water right, Permit 5629, is an irrigation right on the East Fork of the Angelina River with a 1999 priority date The mean shortage of Permit 5629 is increased by approximately 2 acre-feet per year and the period and volume reliability are each reduced by approximately two percent. All the values for the other water rights in the Neches WAM are zero which indicates that there is no change in reliability.

Table B-1: Difference between FNI Base WAM and Lake Naconiche Model

	Difference in	Difference in	Difference in Reliability	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage	Period	Volume
3306R1				(%)
4411A2	0	0	0	0
4411A3	0	0	0	0
4411A4	0	0	0	0
4411A5	0	0	0	0
443411				<u>U</u>
443411				100000
4415M1	0	0	0	0
3237M1	0	0	0	0
3274M4	0	0	0	0
4411M5	0	0	0	0
4411M6	0	0	0	0
441113	0	0	0	0
441114	0	0	0	0
4415M2	0	0	0	0
4415 1	0	0	0	0
4867A1	0	0	0	0
441011	0	0	0	0
3233A1	0	0	0	0
4856R1				
4861A1	0	0	0	0
441211	0	0	0	0
4866A1	0	0	0	0
3286A1	0	0	0	0
3221A1	0	0	0	0
3221A2	. 0	0	0	0
3221A3	0	0	0	0
4388R1				
4402M1	0	0	0	0
3274M5	0	0	0	0
443711	4			
443711				
4401A1	. 0	0	0	.0





NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Period	nce in Reliability Volume (%)
3295A1	0	0	0	0
4382A1	0	0	0	0
4853J				
3299A1	0	0	0	0
4414A1	0	0	0	0
4408R1				
3291A1	0	0	0	0
439311	0	0	.0	0
3249R1		-		
4409M1	0	0	0	0
3247A1	o	0	0	0
3236A1	0	0	0	0
3287A1	0	0	0	0
3276A1	Ŏ	0	0	0
4438/1				
443811		rearranger (patients)		
3226A1	0	0	0	0
3260R1				U
3252A1	O	0	0	0
3299A2	0	0	0	0
4859A1	0	0	0	THE STREET
483911	0	0	0	0
4419R1			- 0	0
3293A1	0	0	0	
4860A1	0	0	0	0
4395A1	0	0	0	0
FILL STEINHA	0	U U	0	0
FILLRAY				
4411M4				
4411 1	0	0	0	0
4411/2		0	0	0
4411A1	0	0	0	0
4411M1	0	. 0	0	0
4425R1	0	0	0	0
The second secon				1900 - 1, 201 0
4840A1	0	0	0	. 0
4397A1	0	0	0	0
3292A1	0	0	0	0
3294A1	0	0	0	0
3294A2	0	0	0	0
4869A1	0	0	0	0
4865A1	0	0	0	0
4846A1	0	0	0	0
3251A1	0	0	0	0
4431A1	0	0	0	0
3245A1	0	0	0	0
3235A1	0	0	0	0



NAME	Difference in Target Diversion (Åc-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Period	nce in Reliability Volume (%)
4380R1		American de la contracta de la		A SAME AND
438001	0	0	0	(
4385R1		4		
3278A1	0	0	0	
3288A1	. 0	0	0	
4850A1	0	0	0	
4872A1	0	0	0	(
4873A1	0	0	0	(
4381R1	100			· · · · · · · · · · · · · · · · · · ·
438411	0	0	0	(
FILLDIVDAM1	Yes Carlotte			
4403A1	0	0	0	
3223N2	0	0	0	
3223N1	0	0	0	
3269A1	0	0	0	Ċ
3279A1	0	0	0	
3222R1		THOUSE CONTRACTOR		
440111	0	0	0	
484713	0	0	0	
3282A1	0	0	0	0
4862A1	0	0	0	
323801				
3303A1	0	0	0	
3300R1	To the Control of			
4418R1		No or whome a second		TOTAL CONTRACTOR OF THE PERSON
3254M3	0	0	0	0
4864M1	0	0	0	0
4870R1				
3254A3	0	0	0	0
4392A1	0	0	0	0
439201				
4429A1	0	0	0	0
3263R1	7777787844444	-		, , , , , , , , , , , , , , , , , , , ,
4426A1	. 0	0	0	
4851R1				
4424R1				
3257R1				· · · · · · · · · · · · · · · · · · ·
4855R1				· · · · · · · · · · · · · · · · · · ·
3242R1	VIII.			
3232R1				
3227R1				
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3261A1	0	0	0	0
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3224A2	0	0	0	0
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4413D1	0	0	0	0
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4430R1				
3230G1	0	0	0	0
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3248A1	0	0	0	0
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3238/1	0	0	0	0
4432A1	0	0	0	0
4383A1	0	0	0	0
3224A1	0	0	0	0
3301A1	0	0	0	0
323711	0	0	0	0
3237A1	0	0	0	- 0
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4030A1	0	0	0	0
4422R1				
4413A3	0	0	0	0
4118R1				
4115A1	0	0	0	0
4167R1				
418611				
418611				
3878A1	0	0	0	0
4196 1				
4196 1				
4199R1				
4219M1	0	0	0	0
4219F1	0	0	0	0
4219A1	0	0	0	0
4430A1	0	0	0	0
4269A1	0	0	0	0
4279A1	0	0	0	-0
438412	0	0	0	0
4384BU	0	0	0	0
4356A1	0	0	0	0
441012	0	0	0	0
4410F1	0	0	0	. 0
3254M5	0	0	0	0
4370R1				
409411	0	0	0	0



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Period	rence in Reliability Volume (%)
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4409M2	0	0	0	0
5228D1	0.	0	0	0
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472436		XXX		
472435				Annual are
555502	0	0	ō	0



Appendix C Water Right Permit 5585

THE STAIN OF THEXAS COUNTY OF TRAVIS

I hereby certify that this is a true and correct

TEXAS NATURAL RESOURCE CONSERVALLON COMPANDED IN STILL IN THE PROPERTY OF THE



permanant records of the Commission. Given under my light and the seal of prince luganlik. Brumm, Chlof Clork Texas Natural Resource

Conservation Commission PERMIT TO APPROPRIATE AND USE STATE WATER

APPLICATION NO. 5585

PERMIT NO. 5585

TYPE: Section 11.121

Name:

County of Nacogdoches

Address:

101 West Main Street

Nacogdoches, Texas 75961

Filed:

April 30, 1997

County:

Nacogdoches

Purposes:

Flood Control and

Recreation

Watershed:

Neches River Basin

Watercourse:

Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, tributary of the Neches River

WHEREAS, the County of Nacogdoches has requested authorization to construct and maintain a dam on Naconiche Creek creating a reservoir to be used for flood control and in-place recreation purposes in Nacogdoches County approximately 13 miles northeast of Nacogdoches. Texas: and

WHEREAS, the dam will be constructed by the Natural Resource Conservation Service (NRCS) and is referred to as Multi-Purpose Structure No. 23-A; and

WHEREAS, the Texas Natural Resource Conservation Commission finds that it has jurisdiction over the application; and

WHEREAS, the Executive Director has determined that although there may be some anticipated temperature differences in Naconiche Creek resulting from the construction of the proposed reservoir, these differences will probably be dissipated downstream due to springflow. seepage and vegetative cover; and

WHEREAS, the Executive Director has determined and recommended that in order to protect habitat and water quality at the reservoir site and downstream of the dam, certain special conditions be included in the permit; and

WHEREAS, the Stephen F. Austin School of Forestry has agreed to manage and monitor a wetland area around the perimeter of the reservoir in accordance with a "Final Monitoring Plan" dated May 14, 1998 that states it is intended and predicted to result in the conversion of 176 acres of land owned by the permittee to hydric soil condition due to increased saturation, thereby allowing more than 50% of the dominant vegetation of the area to propagate into obligate wetland, facultative wetland or facultative plants; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Natural Resource Conservation Commission in issuing this permit.

NOW, THEREFORE, this permit to appropriate and use State water is issued to the County of Nacogdoches, subject to the following terms and conditions:

1. IMPOUNDMENT

Permittee is authorized to construct and maintain a dam creating a reservoir in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas, on Naconiche Creek and to impound therein not to exceed 9072 acre-feet of water at a normal maximum operating elevation of 348.0 feet above mean sea level. The dam will be in the William C. Walker Survey, Abstract No. 596 and the Maria D. Castro Survey. Abstract No. 133 and Station 0+00 on the centerline of the dam at Latitude 31:7708° N and Longitude 94.5694° W, which is also N 27° W, 2650 feet from the southwest corner of the aforesaid Castro survey.

2. USE

Permittee is authorized to use the lake only for flood control and in-place recreational purposes with no diversion right.

3. TIME LIMITATIONS

- a. Construction of the dam herein authorized shall be commenced within two years and completed within five years from date of issuance of this permit. For the purposes of this permit, commencement of construction includes site preparation.
- b. Failure to commence and/or complete construction of the dam within the period stated above shall cause this permit to expire and become null and void, unless permittee applies for an extension of time to commence and/or complete construction prior to the respective deadlines for commencement and completion, and the application is subsequently granted.

SPECIAL CONDITIONS

- a. Permittee is responsible for the continuing maintenance and repair of the dam authorized herein.
- b. Permittee shall pass inflows of State water past the reservoir in such quantities as are necessary to satisfy the rights of downstream domestic and livestock users and the senior and superior rights of other authorized water users.
- c. In order to compensate for impacts to wetlands due to the construction of the aforesaid reservoir, permittee shall:
 - i. implement the mitigation plan developed and described in NRCS' draft and final "Supplemental Environmental Impact Statement for Attoyac Bayou Watershed in Nacogdoches, Rusk, Shelby and San Augustine Counties, Texas", which includes the purchase and preservation of an 852-acre tract of land (bottomland hardwoods) in the Angelina River Bottom;
 - ii. implement the May 14, 1998 "Final Monitoring Plan" for the "Lake Naconiche Created Wetlands" prepared by the permittee and the Stephen F. Austin School of Forestry, which includes monitoring and annual reporting to the Executive Director of the vegetation, soils and hydrology of approximately 176 acres of land owned by permittee around the perimeter of the proposed reservoir;
 - iii. achieve the Minimum Success Criteria" included on Page 4 of the referenced "Final Monitoring Plan" for the 176 acres of land around the perimeter of the reservoir within ten years after initial filling of the proposed reservoir and provide a report to the Executive Director documenting this achievement; and
 - iv. manage the lands included in the mitigation plan and in the monitoring plan in perpetuity, either by permittee or by its designee, so as to insure that these lands have no use inconsistent with the preservation of wetlands and wildlife habitat.
- d. To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir:

December5	cfs	March15 cfs	June4 cf
January8		April11 cfs	
February12	cfs	May 9 cfs	

This permit is issued subject to all superior and senior water rights in the Neches 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 Natural Resource Conservation Commission and to the right of continuing supervision of State water resources exercised by the Commission.

Issue Date: JUL 03 1998

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

For the Commission

EXHIBIT 3

Resolution Authorizing Filing of Application

RESOLUTION

A RESOLUTION OF THE NACOGDOCHES COUNTY COMMISSIONER'S COURT AUTHORIZING FILING OF APPLICATION FOR AMENDMENT TO WATER USE PERMIT NO. 5585

WHEREAS, Nacogdoches County (the "County") owns Water Use Permit No. 5855 (the "Permit");

WHEREAS, the County desires to amend the Permit to add municipal, agricultural, and industrial purposes of use;

WHEREAS, the County also seeks to amend the Permit to add a diversion point on the perimeter of Lake Naconiche for diversion of up to 4,750 acre-feet on an annual basis; and,

WHEREAS, the Texas Water Code and Rules of the Commission on Environmental Quality (the "Commission") require proof of authorization to execute and prosecute applications for amendments to the Permit;

NOW, THEREFORE, BE IT RESOLVED BY THE NACOGDOCHES COUNTY COMMISSIONER'S COURT THAT:

- 1. The County Judge is hereby authorized on behalf of the Commissioner's Court to execute such applications as are necessary to be filed with the Commission to amend the Permit.
- 2. The County Judge is hereby authorized and directed on behalf of the Commissioner's Court to file said applications and to appear and arrange for the appearances of persons representing the County at the hearings and other proceedings on the applications before the Commission, and otherwise direct prosecution of the applications on behalf of the Commissioner's Court.

PASSED, ADOPTED AND APPROVED THIS	144 day of april, 2015
Jerry Don Williamson, Precinct 1 Commissioner	Jerry Stone, Precinct 2 Commissioner
1 511	Short Misses
Jim Elder, Precinct 3 Commissioner	Elton Milstead, Precinct 4 Commissioner

4657948.1

EXHIBIT 4

Diversion Point Information Sheet

Supplemental Diversion Point Information Sheet

Diversion	Point No. 1.	
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- 1) Watercourse: Naconiche Creek
- 2) Location of point of diversion at <u>on the perimeter of the existing Lake Naconiche. Reservoir location is in Nacogdoches County. Texas as described in the Supplemental Dam/Reservoir Sheet.</u>
- 3) Location from County Seat: Varies miles in a northeast direction from Nacogdoches,

Nacogdoches County, Texas.

Location from nearby town (if other than County Seat): _____ miles in a _____

direction from ______, a nearby town on county highway map.

4) Zip Code: 75946

5) The diversion will be (check (√) all appropriate boxes and if applicable, indicate whether existing or proposed):

Directly from stream	Existing	Proposed
From an on-channel reservoir	Х	
From a stream to an off-channel reservoir		
From a stream to an on-channel reservoir		
From an off-channel reservoir		
Other method (explain fully, use additional sheets if necessary)		

- 6) Rate of Diversion (Check (√) applicable provision):
- X 1. Diversion Facility:

A.11,771 Maximum gpm (gallons per minute)

- 1) Unknown Number of pumps
- 2) Unknown Type of pump
- 3) Unknown gpm, Pump capacity of each pump
- 4) Portable pump Yes or X No

2. If by	gravity:		
A	Headgate	Diversion Dam	Maximum gpm
B.	Other method (e	explain fully - use additiona	

7) The drainage area above the diversion point is 17,453 acres or 27.27 square miles.

EXHIBIT 5

Supplemental Dam/Reservoir Information Sheet

Supplemental Dam/Reservoir Information Sheet

Dam (structure), Reservoir and Watercourse Data

Α.	Type of Storage Reservoir (indicate by checking (√) all applicable)							
	on-channel off-channel existing structure proposed structure* exempt structure*							
	*Applicant shall provide a copy of the notice that was mailed to each member of the governing body of each county and municipality in which the reservoir, or any part of the reservoir, will be located as well as copies of the certified mailing cards.							
	**TWC Section 11.143 for uses of water for other than domestic, livestock, or fish and wildlife from an existing, exempt reservoir with a capacity of 200 acre-feet or less. Please complete Paragraph 6 below if proceeding under TWC 11.143.							
	Date of Construction 2006							
B.	Location of Structure No. 1.							
	1) Watercourse: Naconiche Creek							
	2) Location from County Seat: 13 miles in a northeast direction from Nacogdoches,							
	Nacogdoches County, Texas.							
	Location from nearby town (if other than County Seat): miles in a direction from							
	, a nearby town shown on county highway map.							
	3) Zip Code: <u>75946</u>							
	4) The dam will be/is located in the William C. Walker, and Maria D. Castro Original Survey							
	Nos. <u>347</u> , Abstract No. <u>596 and 133</u> in <u>Nacogdoches</u> County, Texas.							
	5) Station <u>0+00</u> on the centerline of the dam is <u>N 27 W</u> ° (bearing), <u>2650</u> feet							
	(distance) from the southwest corner of Maria D. Castro Original							
	Survey No. 347, Abstract No.133, in Nacogdoches County, Texas, also							
	being at Latitude 31.7708°N, Longitude 94.5694°W. (From Permit 5585).							
C.	Reservoir:							
	1) Acre-feet of water impounded by structure at normal maximum operating level; 9,072 acre-feet							
	2) Surface area in acres of reservoir at normal maximum operating level: 692 acres							
D.	The drainage area above the dam is 17,453 acres or 27.27 square miles.							
E.	Other:							
	1) If this is a U.S. Natural Resources Conservation Service (NRCS) (formerly Soil Conservation							
	Service (SCS)) floodwater-retarding structure, provide the Site No. 23A and watershed							
	project name <u>Attoyac Bayou Watershed</u>							
	2) Do you request authorization to close the "ports" or "windows" in the service spillway?							
	T Yes No							

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION



AN ORDER extending the time for the County of Nacogdoches to complete construction of the reservoir authorized by Water Use Permit No. 5585

An application by County of Nacogdoches was presented to the Executive Director of the Texas Natural Resource Conservation Commission for consideration of approval. The applicant requests authorization to extend the time to complete construction of the reservoir authorized by Water Use Permit No. 5585.

After considering the application and matters related thereto, the Commission is of the opinion that the application is reasonable and should be granted.

NOW THEREFORE, BE IT ORDERED BY THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION that the County of Nacogdoches shall complete construction of the reservoir by December 31, 2006.

All other terms and conditions contained in Water Use Permit No. 5585 which are not specifically contrary to the terms of this order shall remain in full force and effect.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

For the Commission

DATE ISSUED: NOV 1 4 2000

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION



PERMIT TO APPROPRIATE AND USE STATE WATER

APPLICATION NO. 5585

PERMIT NO. 5585

TYPE: Section 11,121

Name:

County of Nacogdoches

Address:

101 West Main Street

Nacogdoches, Texas 75961

Filed:

April 30, 1997

County:

Nacogdoches

Purposes:

Flood Control and

Recreation

Watershed:

Neches River Basin

Watercourse:

Naconiche Creek, tributary of Attoyac Bayou, tributary

of the Angelina River,

tributary of the Neches River

WHEREAS, the County of Nacogdoches has requested authorization to construct and maintain a dam on Naconiche Creek creating a reservoir to be used for flood control and in-place recreation purposes in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas; and

WHEREAS, the dam will be constructed by the Natural Resource Conservation Service (NRCS) and is referred to as Multi-Purpose Structure No. 23-A; and

WHEREAS, the Texas Natural Resource Conservation Commission finds that it has jurisdiction over the application; and

WHEREAS, the Executive Director has determined that although there may be some anticipated temperature differences in Naconiche Creek resulting from the construction of the proposed reservoir, these differences will probably be dissipated downstream due to springflow, seepage and vegetative cover; and

WHEREAS, the Executive Director has determined and recommended that in order to protect habitat and water quality at the reservoir site and downstream of the dam, certain special conditions be included in the permit; and

WHEREAS, the Stephen F. Austin School of Forestry has agreed to manage and monitor a wetland area around the perimeter of the reservoir in accordance with a "Final Monitoring Plan" dated May 14, 1998 that states it is intended and predicted to result in the conversion of 176 acres of land owned by the permittee to hydric soil condition due to increased saturation, thereby allowing more than 50% of the dominant vegetation of the area to propagate into obligate wetland, facultative wetland or facultative plants; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Natural Resource Conservation Commission in issuing this permit.

NOW, THEREFORE, this permit to appropriate and use State water is issued to the County of Nacogdoches, subject to the following terms and conditions:

1. IMPOUNDMENT

Permittee is authorized to construct and maintain a dam creating a reservoir in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas, on Naconiche Creek and to impound therein not to exceed 9072 acre-feet of water at a normal maximum operating elevation of 348.0 feet above mean sea level. The dam will be in the William C. Walker Survey, Abstract No. 596 and the Maria D. Castro Survey, Abstract No. 133 and Station 0+00 on the centerline of the dam at Latitude 31.7708° N and Longitude 94.5694° W, which is also N 27° W, 2650 feet from the southwest corner of the aforesaid Castro survey.

2. USE

Permittee is authorized to use the lake only for flood control and in-place recreational purposes with no diversion right.

3. TIME LIMITATIONS

- a. Construction of the dam herein authorized shall be commenced within two years and completed within five years from date of issuance of this permit. For the purposes of this permit, commencement of construction includes site preparation.
- b. Failure to commence and/or complete construction of the dam within the period stated above shall cause this permit to expire and become null and void, unless permittee applies for an extension of time to commence and/or complete construction prior to the respective deadlines for commencement and completion, and the application is subsequently granted.

4. SPECIAL CONDITIONS

- a. Permittee is responsible for the continuing maintenance and repair of the dam authorized herein.
- b. Permittee shall pass inflows of State water past the reservoir in such quantities as are necessary to satisfy the rights of downstream domestic and livestock users and the senior and superior rights of other authorized water users.
- c. In order to compensate for impacts to wetlands due to the construction of the aforesaid reservoir, permittee shall:
 - i. implement the mitigation plan developed and described in NRCS' draft and final "Supplemental Environmental Impact Statement for Attoyac Bayou Watershed in Nacogdoches, Rusk, Shelby and San Augustine Counties, Texas", which includes the purchase and preservation of an 852-acre tract of land (bottomland hardwoods) in the Angelina River Bottom;
 - ii. implement the May 14, 1998 "Final Monitoring Plan" for the "Lake Naconiche Created Wetlands" prepared by the permittee and the Stephen F. Austin School of Forestry, which includes monitoring and annual reporting to the Executive Director of the vegetation, soils and hydrology of approximately 176 acres of land owned by permittee around the perimeter of the proposed reservoir;
 - iii. achieve the <u>Minimum Success Criteria</u>" included on Page 4 of the referenced "Final Monitoring Plan" for the 176 acres of land around the perimeter of the reservoir within ten years after initial filling of the proposed reservoir and provide a report to the Executive Director documenting this achievement; and
 - iv. manage the lands included in the mitigation plan and in the monitoring plan in perpetuity, either by permittee or by its designee, so as to insure that these lands have no use inconsistent with the preservation of wetlands and wildlife habitat.
- d. To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir:

December5 cfs	March15 cfs	June4 cfs
January8 cfs	April11 cfs	
February12 cfs	May 9 cfs	

This permit is issued subject to all superior and senior water rights in the Neches 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 Natural Resource Conservation Commission and to the right of continuing supervision of State water resources exercised by the Commission.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Issue Date: **JUL 0 3 1998**

For the Commission

December 19, 2005

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FYI - Not sure of

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Know if any makes

Liscuss. M.

Planning, Environmental, and Regulatory Division Regulatory Branch

SUBJECT: Project Number 200100006

Honorable Sue Kennedy Nacogdoches County 101 W. Main, Suite 130 Nacogdoches, Texas 75961

Dear Honorable Kennedy,

This is in response to your letter dated November 5, 2005, requesting a modification to Department of the Army permit 198900163 for the discharge of dredged and fill material into waters of the United States associated with the construction of the dam and reservoir on Naconiche Creek in Nacogdoches County, Texas.

We have reviewed and hereby approve your request. Permit Number 198900163 is modified as follows:

1. Replace "December 31, 2005" in General Condition 1 on page one of the permit with "December 31, 2006".

This modification is effective immediately. All other terms and conditions of the original permit remain in full force and effect.

If you have any questions concerning this letter, please contact Mr. David Madden at the address above or telephone (817)886-1741.

Sincerely,

Wayne A. Lea Chief, Regulatory Branch

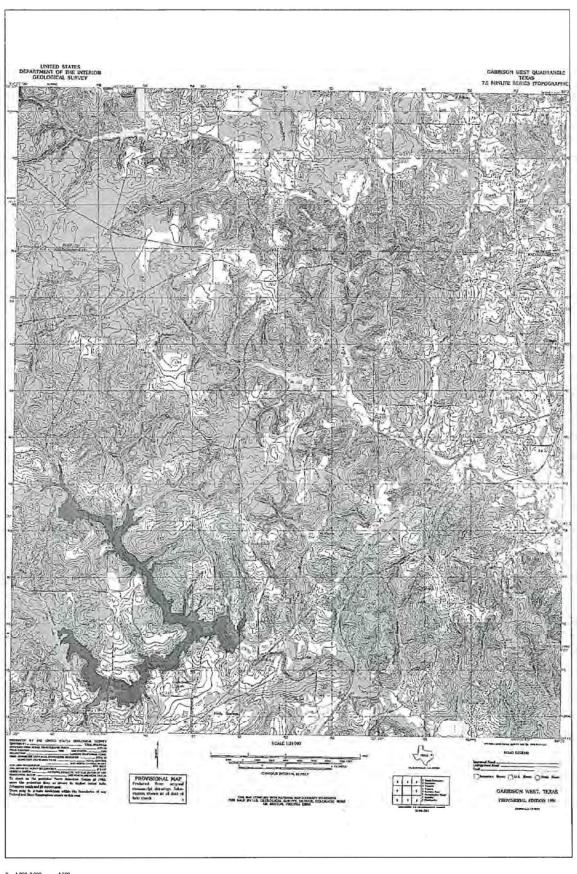


Appendix A USGS 7.5 Minute Topographic Map

Nacogdoches County



Full Scale 7.5 Minute USGS Garrison West Quadrangle Map Included in supplementary sleeve



0 1,000 2,000 4,000 Feet





Appendix B WAM Modeling and No Injury Analysis

BU

2



Modifications to the Neches River WAM

The analyses in this water right application are based on the October 2012 version of the Neches River WAM, full authorization scenario and including Senate Bill 3 instream flow requirements, using the August 2013 version of WRAP-SIM. (WRAP-SIM is the computer program used to run the WAM.).

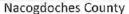
Base WAM Changes ** FNI Change - Changed to match the pattern in the permit UCUT5585 492 666 922 655 553 238 184 184 179 184 179 307 **UCUT5585 0.101 0.152 0.190 0.139 0.114 0.051 **UC 0.038 0.038 0.038 0.038 0.038 0.063 ** Sub modeled right - Lake Palestine FNI change - add non-subordination rights to first simulation WR3254N1 196000 UMUN19560430 1 3254M1 A3254 WSPALEST 410000 PX 3 ** WR3254N1 16400 UMUN19690915 3254M3 3254 32541s WSPALEST 411840 PX 3 **PX 1 4411N2 WR3254N1 400 UMUN19700914 1 3254A3 3254 32541s WSPALEST 411840 PX 3 **PX 2 1 4411N2 ** IF3254N2 IFCON19670309 IFUNRMWD 3254N2 TO 2 ADD CONT 302. 3254N1 TO 2 SUB WR3254N2 0 19670309 FILLDIVDAM1 3254 WSUNRMDW 119 1.3676 0.615 1 4411N2 WR3254N2 18000 UMUN19830425 3254M5 3254 3254dd WSUNRMDW 119 1.3673 0.615 WSPALEST 411840 OR3254N1 411840 PX 3 **PX 1 4411N2 7310 UMUN19841001 WR3254N2 3254M7 3254 3254dd WSUNRMDW 119 1.3673 0.615 WSPALEST 411840 OR3254N1 41,1840 1 PX 3 **PX 至415到2 ** ** FNI change - Putting in at same priority date as BU from Steinhagen. This minimizes picking up extra available flow not accessed because of PX 3 above. using option 2 to limit to depletions at subordinated reservoir. WR3254N2 0 20091129 3254divDamSub 3254 119 1.3676 WSUNRMDW 0.615 BU 3254dd 2 4411N2 PX WR3254N1 20091129 3254PalSub 3254 WSPALEST 411840

32541s

2 4411N2



```
** Lake Columbia
** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
separate right
WR 4537A
         53307
                    UMUN19851122 1
                                                                       4537M1
                                                                                 4537 4537s
WSCOLUMB 195500
     3
PX
**PX
                         1 4411A1
                                                                       4537M2
WR 4537A
            2200
                    UMUN19851122 1
                                                                                 4537
                                                                                       4537s
WSCOLUMB 195500
    3
 **PX
        2
                        1 4411A1
WR 4537A
         30000
                    UIND19851122 1
                                                                       4537I1
                                                                                 4537
                                                                                      4537s
WSCOLUMB 195500
PX
      3
        2
                        1 4411A1
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR 4537A
                       20091129 1
                                                                      4537sub
                                                                                 4537
WSCOLUMB 195500
                                  4537s
BU
                      2 4411A1
PX
       2
** Lake Striker
** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
separate right
           5000
                    UIND19551205 1
                                                                       4847I1
                                                                                 4847
WR 4847A
WSSTRIKR
          26500
PX
      3
                                                                       4847I2
                                                                                 4847
WR 4847A
              0
                    UIND19560430 1
WSSTRIKR
           26960
PX
       3
                                                                       484713
                                                                                 4847
WR 4847A
            5600
                    UIND19680205
            5600
                    UIND19680205 2
                                                                         484713
                                                                                   4847
 **WR 4847A
WSSTRIKR 26960
PX
      3
 **PX
        2
                        1 4411A1
 ** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
 ** using option 2 to limit to depletions at subordinated reservoir.
                       20091129
                                                                      4847sub
                                                                                 4847
WR 4847A
WSSTRIKE
           26960
                         4847I3
BU
                      2 4411A1
PX
       2
 ** Lk Nacogdoches
 ** FNI change -
                   Add priority diversion to first simulation, explicity model subordination as a
 separate right
                                                                        4864M1
                                                                                 4864
 WR 4864A 22000
                    UMUN19700105 1
WS NACH
           41000
PX
      3
 **PX
                         1 4411A1
 **
WR 4864A
              0
                     REC19770627 1
                                                                        4864R1
                                                                                 4864
WS NACH
           42318
                        1 4411A1
 ** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
 available flow not accessed because of PX 3 above.
 ** using option 2 to limit to depletions at subordinated reservoir.
WR 4864A
              0
                       20091129
                                                                       4864sub
                                                                                 4864
```





```
WS NACH
         42318
BU
                        4864M1
                     2 4411A1
PX
   TPWD wetlands
** FNI change - added group identifier
** FNI change - Add priority diversion to first simulation, explicity model subordination as a
separate right
             0 WTFILL19960709
                                                                      555501
                                                                               5555
WR555541
WSWETLAN
            168
SO
            168
                   168 5555A1
IF5555A1
          6460 TPWDIF20041103
                                   1
                                                     IF5555A2
WR5555A1 10000
                      20041103 1
                                                                      555502
                                                                               5555
    3
PX
       2
                       1 4411A1
**PX
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking ap extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR5555A1
                                                                     5555sub
                                                                               5555
                      20091129
BU
                        555502
                     2 4411A1
      2
PX
**
** FNI Change - Changed to match IF requirment in the permit
                                     1
                                                         5585N1
**IF 5585A 57196 UT558519970430
IF 5585A 4744 UT558519970430
                                                       5585N1
** FNI change - Add priority diversion to first simulation, explicity model subordination as a
separate right
             0
WR 5585A
                   REC19970430 1
                                                                      5585R1
                                                                               5585
WSNACKNK
           9072
**PX 2
                       1 4411A1
PX
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
   using option 2 to limit to depletions at subordinated reservoir.
                   REC20091129
                                                                      5585R2
                                                                               5585
WR 5585A
              0
WSNACKNK
           9072
PX
    2
                     2 4411A1
** Lake Pinkston
** FNI change -
                  Add priority diversion to first simulation, explicity model subordination as a
separate right
           3800
                  UMUN19720702 1
                                                                      4404M1
                                                                               4404
WR 4404A
WSPINKST
           7380
    3
PX
**PX
       2
                       1 4411A1
** FNI change - Putting in at same priority date as BU from Rayburn. This minimizes picking up extra
available flow not accessed because of PX 3 above.
** using option 2 to limit to depletions at subordinated reservoir.
WR 4404A
                      20091129
                                                                     4404sub
                                                                              4404
WSPINKST
           7380
BU
      2
                     2 4411A1
PX
** FNI change - added group identifier
                                                                      4409M1
                                                                              4409
WR 4409A 500 LMUN19571101 1
```

 $\star\star$ FNI change - Add priority diversion to first simulation, explicity model subordination as a separate right



WR 4409A 785 WSCARRIZ 2750 PX 3	LMUN20000222 1.7193 0.6199	0		4409M2	4409
**PX 2 ** FNI change - Pu available flow not			ty date as BU from Rayburn. 3 above.	This minimize	s picking up extra
** using option : WR 4409A			at subordinated reservoir.	4409sub	4409
** since we comb	ined several to u		s type 2 - no refill until a up identifiers several no lo		dination done
** Lake Columbia **WR4411A1 WR4411A1 WSRAYBRN 2898200 BU 0 0	20091129 20091129 4537sub	2		BURAYBURN1 BURAYBURN1	4411 4411
BU 0 0 **BU 0 0 PX 2 **					
**WR4411A1 **WSRAYBRN 2898200 **BU 0 0				BURAYBURN2	4411
PX 2 ** *******************************	20091129			BURAYBURN3	4411
**WSRAYBRN 2898200 **BU 0 0 **PX 2					
** TPWD wetlands **WR4411A1 WR4411A1 WSRAYBRN 2898200	20091129	2		BURAYBURN4 BURAYBURN4	4411 4411
BU 0 0 0 **BU 0 0	5555sub 555502				
** FNI change - m ** since we comb	ade this group of ined several to u	f rights	s type 2 - no refill until a	after all subco	cdination done
** Lake Columbia					
**WR4411A1	20091129			BURAYBURN1	4411
WR4411A1 WSRAYBRN 2898200	20091129	2		BURAYBURN1	4411
BU 0 0	4537sub				
**BU 0 0 PX 2	4537M1				
**					
**WR4411A1 **WSRAYBRN 2898200	20091129			BURAYBURN2	4411
**BU 0 0 **PX 2					
**WR4411A1	20091129			BURAYBURN3	4411
**WSRAYBRN 2898200 **BU 0 0 **PX 2	453711				
** TPWD wetlands **WR4411A1 WR4411A1	20091129 20091129			BURAYBURN4 BURAYBURN4	4411 4411
WSRAYBRN 2898200 BU 0 0 **BU 0 0	5555sub 555502				
PX 2 ****STRIKER **WR4411A1 WR4411A1 WSRAYBRN 2898200	20091 1 29 20091129			BURAYBURN5 BURAYBURN5	4411 4411



BU 0 0 4847sub		
**BU 0 0 4847I3		
PX 2 ** Lake Palestine at diversion dam		
**WR4411N2 20091129	BUSTEINHA6	4411
WR4411N2 20091129 2	BUSTEINHA6	4411
WSSTEINH 94250		
BU 0 0 3254divDamSub **BU 0 0 3254M3		
PX 2		
** Lake Palestine lakeside		
**WR4411N2 20091129	BUSTEINHA6	4411
WR4411N2 20091129 2	BUSTEINHA7	4411
WSSTEINH 94250 BU 0 0 3254PalSub		
**BU 0 0 3254A3		
PX 2		
**		
**WR4411N2 20091129	BUSTEINHA8	4411
**WSSTEINH 94250 **BU 0 0 3254M5		
**PX 2		
**WR4411N2 20091129	BUSTEINHA9	4411
**WSSTEINH 94250		
**BU 0 0 3254M7		
**PX 2 ** add municipal beneficiaries of Condition C		
** Lake Nacogdoches		
**WR4411A1 20091129	BURAYBUR10	4411
WR4411A1 20091129 2	BURAYBUR10	4411
WSRAYBRN 2898200		
BU 0 0 4864sub **BC 0 0 4864M1		
**BC 0 0 4864M1 PX 2		
**		
**WR4411A1 20091129	BURAYBUR11	4411
**WSRAYBRN 2898200	BURAYBUR11	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1	BURAYBUR11	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2	BURAYBUR11	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1	BURAYBUR11 BURAYBUR12	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2		
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200	BURAYBUR12	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub	BURAYBUR12	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1	BURAYBUR12	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub	BURAYBUR12	4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR12	4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200	BURAYBUR12 BURAYBUR12 BURAYBUR13	4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 2009129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR44411A1 20091129 WR44411A1 20091129	BURAYBUR12 BURAYBUR12 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR44411A1 20091129 2	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 2009129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR44411A1 20091129 WR44411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WR44411A1 20091129 WRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 0 5585R2 PX 2	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 50091129 WR4411A1 50091129 WR4411A1 50091129 WR4411A1 50091129 WR4411A1 50091129 WSRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 0 5585R2 PX 2 **	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 50091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR13	4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 5585R2 PX 2 ** WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 50091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **wR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **wR4411A1 20091129 WR4411A1 20091129 2 WSRAYBRN 2898200 BU 0 0 4409sub **BU 0 0 4409sub **BU 0 0 4409M2 PX 2 ** Lake Naconiche **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WRAYBRN 2898200 **BU 0 0 5585R1 BU 0 0 5585R2 PX 2 ** WR4411A1 20091129 WRRAYBRN 2898200 PX 2 ** WR4411A1 20091129 WSRAYBRN 2898200 PX 2 ** WR4411A1 20091129 WSRAYBRN 2898200 PX 2 ** WR4411A1 20091129 WSRAYBRN 2898200 PX 2 ** WR4411A1 20091129	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14	4411 4411 4411 4411 4411
**WSRAYBRN 2898200 **BU 0 0 4864R1 **PX 2 ** Lake Pinkston **WR4411A1 20091129 WSRAYBRN 2898200 BU 0 0 4404sub **BU 0 0 4404M1 PX 2 ** San Augustine Carrizo Crk **WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 WR4411A1 20091129 EXEMPLE OF A AND A AN	BURAYBUR12 BURAYBUR13 BURAYBUR13 BURAYBUR14 BURAYBUR14 REFILLRB	4411 4411 4411 4411 4411



The following records were added to the neches 3.dat file to model the proposed diversion from Lake Naconiche.

```
FNI change - pattern for new base eflow at lake Naconiche
UC nksub
           74
                      74
                                 24 24
                                             24
                                                           397
                 68
            15
                   15
                                 22
                                        21
                                               22
UC
                          14
UC nkbas
           375
                  341
                         375
                                118
                                       122
                                              118
                                                          1817
UC
            54
                   54
                          52
                                 70
                                        68
                                              70
** FNI change - add control point for subsistence calculations for Lake Naconiche
**CP 5585A
           ATCH
                                   7
CP 5585A nksubs
                                  7
CPnksubs
          ATCH
                                            5585A
**FNI change dummy CPs for Lake Naconiche
CPfknk02
          OUT
                                  2
                                      NONE
                                             NONE
           OUT
                                      NONE
                                             NONE
CPfknk03
** FNI change - fake CPs associated with Lake Naconiche SB3 instream flows
CT
** FNI Change - Changed to match IF requirement in the permit
                                 1
                                                      5585N1
****IF 5585A 57196 UT558519970430
**IF 5585A 4744 UT558519970430
                                                    5585N1
** FNI change - add instream flow based on Alto multiplied by DA ratio. Giving everything a priority
junior to SB3
    only base flows apply since diversion or storage is less than 10,000
** Subsistence flow at CP just downstream of reservoir
   giving it priority date of original certificate.
         397 nksub19970430
                                                 nksubsis
IFnksubs
** Regulated flow - for checking
                                                                         5585
                                                                nklook
WRfknk02
                    19970430
TO
     2
                  ADD
                                     5585A
** Holds the monthly target
                                                             holdnkbase
WRfknk02 1817 nkbas19970430
                                                                         5585
** Ratio of target to regulated flow
WR£knk03
               nkbas19970430
                                                               nkOnOff
                                                                         5585
                                     5585A
                                                                  CONT
TO
    2 .
                 ADD
     6
                  DIV
                                                      holdnkbase
TO
** Flow switch based on ratio calculated above. Applied if > 1
IF 5585A 1817 nkbas19970430
                                                  nkbase
FS 5 fknk03
                1
                                  1 9999999
   Original authorization.
WR 5585A
            0
                  REC19970430 1
                                                                5585R1
                                                                         5585
          9072
WSNACKNK
**PX
       2
                     1 4411A1
**PX
       3
                      2 4411A1
** FNI Change - New WR to calculate yield. With subordination, but at a 2016 priority date
         4750
                                                                5585FY
                UMUN20160000 1
WR 5585A
WSNACKNK
          9072
PX
                    2 4411A1
** end FNI change
** FNI change - Lake Naconiche, change to priority date of new right, allow to fill at that date.
**WR4411A1
                      20091129
                                                               BURAYBUR14
                                                                           4411
                                                               BURAYBUR14
                                                                           4411
**WR4411A1
                       20091129
WR4411A1
                     20160000 1
                                                             BURAYBUR14
                                                                         4411
WSRAYBRN 2898200
      0
              0
                        5585R1
**BU
**BU
       0
              0
                        5585R2
```



Nacogdoches County

BU 0 0 5585FY PX 2

The following records were added to the neches3.dis file.

** FNI change
FDnksubs ATCH 0

**

** FNI change
WPnksubs 28.07 42 46

**

No changes were made to the other input files.



The impact analysis for the diversion from Lake Naconiche, modeled as described above, has no impact on water rights in the Neches WAM (Table B-1). Table B-1 shows the *difference* between the FNI Base WAM model run and the modified WAM for all water rights in the October 2012 version of the Neches River WAM. All the values for water rights in the Neches WAM are zero which indicates that there is no change in reliability.

Table B-1: Difference between FNI Base WAM and Lake Naconiche Model

C MARRIES SERVICE	Difference in	Difference in		rence in Reliability
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)
3306R1				
4411A2	0	0	0	0
4411A3	0	0	0	0
4411A4	0	0	0	0
4411A5	0	0	0	0
443411				
443411				
4415M1	0	0	0	0
3237M1	0	0	0	0
3274M4	0	0	0	0
4411M5	0	0	0	0
4411M6	0	0	0	0
441113	0	0	0	0
441114	0	0	0	0
4415M2	0	0	0	0
441511	0	0	0	0
4867A1	0	0	. 0	0
441011	0	0	0	0
3233A1	0	0	0	0
4856R1				
4861A1	0	0	0	0
4412 1	0	0	0	0
4866A1	0	0	0	0
3286A1	0	0	0	0
3221A1	0	0	0	0
3221A2	0	0	0	0
3221A3	0	0	0	0
4388R1				
4402M1	0	0	0	0
3274M5	0	0	0	0
443711				
443711				
4401A1	0	0	0	0
4396A1	0	0	0	0
4857A1	0	0	0	0
4853M1	0	0	0	0



NY HOW DELICION	Difference in Difference in Difference in Re		rence in Reliability	
NAME	Target Diversion	Mean Shortage	Period	Volume
	(Ac-Ft/Yr)	(Ac-Ft/Yr)	(%)	(%)
485311	0	0	0	0
3222G1	0	0	0	0
4387A1	0	0	0	0
4843R1				
4427R1				
443311				
443311				-
3277A1	0	0	0	0
4848R1				
4400R1				
4406A1	0	0	0	0
3275A1	0	0	0	0
3222G2	0	0	0	0
3302R1				
3289A1	0	0	0	0
4853E	0	0	0	0
4839A1	0	0	0	0
4841A1	0	0	0	0
3222G3	0	0	0	0
4871R1			,	
3256M1	0	0	0	0
325611	0	0	0	0
4399M1	0	0	0	. 0
3253A1	0	0	0	0
3274M3	0	- 0	0	0
3274R1				
3244A1	0	0	0	. 0
3297A1	0	0	0	0
3296A1	0	0	0	0
3266A1	0	0	0	0
3283A1	0	0	0	0
3284A1	0	0	0	0
3280A1	0	0	0	0
3298A1	0	0	0	0
4858A1	0	0	0	0
4858A2	0	0	0	0
3290A1	0	0	0	0
4847I1	0	0	0	0
4393D2	0	0	0	0
3254M1	0	0	0	0
484712				
3285A1	0	0	0	0
4386A1	0	0	0	0
3295A1	0	0	0	0
4382A1	. 0	0	0	0
4853J				



THE RESERVE THE RE	Difference in	Difference in Difference in		Difference in Reliability	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)	
3299A1	0	0	0	0	
4414A1	0	0	0	0	
4408R1					
3291A1	0	0	0	0	
439311	0	0	0	0	
3249R1					
4409M1	0	0	0	0	
3247A1	0	0	0	0	
3236A1	0	0	0	0	
3287A1	0	0	0	0	
3276A1	0	0	0	0	
443811					
4438I1					
3226A1	0	0	0	0	
3260R1					
3252A1	0	0	0	0	
3299A2	0	0	0	0	
4859A1	0	0	0	0	
483911	0	0	0	0	
4419R1					
3293A1	0	. 0	0	0	
4860A1	0	0	0	0	
4395A1	0	0	0	0	
FILL STEINHA					
FILLRAY					
4411M4	0	0	0	0	
441111	0	0	0	. 0	
441112	0	0	0	0	
4411A1	0	0	0	0	
4411M1	0	0	0	0	
4425R1					
4840A1	0	0	0	0	
4397A1	0	0	. 0	0	
3292A1	0	0	0	0	
3294A1	0	0	0	0	
3294A2	0	0	0	0	
4869A1	0	0	0	0	
4865A1	0	0	0	0	
4846A1	0	0	0	0	
3251A1	0	0	0	0	
4431A1	0	0	0	0	
3245A1	0	0	0	0	
3235A1	0	0	0	0	
4380R1					
438001	0	0	0	0	
4385R1					



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Diffe Period (%)	rence in Reliability Volume (%)
3278A1	0	0	0	0
3288A1	0	0	0	0
4850A1	0	0	0	0
4872A1	0	0	0	0
4873A1	0	0	0	0
4381R1				
438411	0	0	0	0
FILLDIVDAM1				
4403A1	0	0	0	0
3223N2	0	0	0	0
3223N1	0	0	0	0
3269A1	0	0	0	0
3279A1	0	0	0	0
3222R1				
440111	0	0	0	0
484713	0	0	0	0
3282A1	0	0	0	0
4862A1	0	0	0	0
323801				
3303A1	0	0	0	0
3300R1				
4418R1				
3254M3	0	0	0	0
4864M1	0	0	0	0
4870R1				
3254A3	0	0	0	0
4392A1	. 0	0	0	0
439201				
4429A1	0	0	0	0
3263R1	1.0			
4426A1	0	0	0	0
4851R1	1			
4424R1				
3257R1				
4855R1				
3242R1				
3232R1				
3227R1				
3243R1				
3228R1				
3272R1				
4404M1	0	. 0	0	0
3264R1	<u> </u>		<u> </u>	
3261A1	0	0	0	0
4405R1	ļ		1	,
3224A2	0	0	0	0



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Differ Period (%)	rence in Reliability Volume (%)
3273R1	[Mercy 10]	(ne roj rij	(Agr	(A)
3255R1				
4413D1	0	0	0	0
4413B3	0	0	0	-0.05
4868R1				
4379R1				
3281R1				1
3246R1	(x)			×
4423R1				
3267R1				
3234R1				
3231G1	0	0	0	0
4417R1				
4430R1				
3230G1	0	0	0	0
3271R1				
4416R1				
3248A1	0	0	0	0
4854R1				
4391R1				
4428R1				
3304R1				
4420R1				
3262R1				,
4389R1				
484911				
4421R1		h .		
4845R1				
4398R1				
3240R1				
4394R1				
4844R1				
4386R1				
4407R1				
3229R1				
3305R1				
3239R1				
3241R1				
4390R1				
4842R1				
4852R1				
326831				
3258R1				
3265R1				
3270R1				
4425R2				



NAME	Difference in Target Diversion (Ac-Ft/Yr)	Difference in Mean Shortage (Ac-Ft/Yr)	Differ Period (%)	rence in Reliability Volume (%)
443611	(AC-IG/III)	(Ab-11) (III)	(20)	(70)
4436I1				7
3259G1				
4864R1				
323811	0	0	0	0
4432A1	0	0	0	0
4383A1	0	0	0	0
3224A1	0	0	0	0
3301A1	0	0	0	0
323711	0	0	0	0
3237A1	0	0	0	0
3237A2	0	0	0	0
3250A1	0	0	0	0
4863A1				
4863A2				
443511				
443511				
4030A1	0	0	0	0
4422R1				
4413A3	0	0	0	0
4118R1				
4115A1	0	0	0	0
4167R1				
418611				
418611				
3878A1	0	0	0	0
419611				
419611				
4199R1				
4219M1	0	0	0	0
4219F1	0	0	0	0
4219A1	0	0	0	0
4430A1	0	0	0	0
4269A1	0	0	0	0
4279A1	0	0	0	0
438412	0	0	0	0
4384BU	0	0	0	0
4356A1	0	0	0	0
441012	0	0	0	0
4410F1	0	0	0	0
3254M5	0	0	0	0
4370R1				
409411	0	0	0	0
409412				
4448A1	0	0	0	0
3254M7	0	0	0	0



	Difference in	Difference in	OF RECORDER PARTY OF THE	ence in Reliability Volume
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	volume (%)
4501R1	(ACHG/H)	(MCTG) TO	\cci	(2.7)
4540R1				
4543A1	0	0	0	0
4596A1	0	0	0	0
4595R1				
4609R1				
5013R1				
5015R1				
5027 1	0	0	0	0
4537M1	0	0	0	0
4537M2	0	. 0	0	0
4537I1	0	0	0	0
504111		1		
509111				
509111				
5087R1				
5134A1	0	0	0	0
5175M1				
5175IVI1 5181R1				
518401				
5185M1				
520611				
520611				
521311				
521311				
5222R1			-	
5222KI 5228A2	0	0	0	0
5232I1	0	0	0	0
531411	0	0	0	0
5351R1	0	U	U	0
	0	0	0	0
3224A3	0	0	0	0
5389A1	0	0	-	0
5415M1		0	0	0
5484A1	0	0	0	0
5486A1	0	0	0	0
5508A1		0	0	0
5508A2	0	0		0
550801	0	0	- 0	0
555501				
5583R1			-	
5585R1			-	
561331				
5629A1	0	0	0	0
5669N1			-	
4409M2	0	0		0
5228D1	0	0	0	0



· 18.29-11.00	Difference in	Difference in	Difference in Reliability	
NAME	Target Diversion (Ac-Ft/Yr)	Mean Shortage (Ac-Ft/Yr)	Period (%)	Volume (%)
P_5757				
4413B3				
472436				
472435				
555502	0	0	0	0



Appendix C Water Right Permit 5585

THE STA DE TEXAS COUNTY OF TRAVIS

Texas Natural Resource Consermantally checked in the least true and correct Texas Natural Resource Conservation

COPY



Permanent records of the Commission.

Gluon under my light and the seal of office of the commission.

Gluon III 03 19

Gluon K. Brumm, Chlor Clerk
Texas Natural Resource
Conservation Commission

PERMIT TO APPROPRIATE AND USE STATE WATER

APPLICATION NO. 5585

PERMIT NO. 5585

TYPE: Section 11.121

Name:

County of Nacogdoches

Address:

101 West Main Street

Nacogdoches, Texas 75961

Filed:

April 30, 1997

County:

Nacogdoches

Purposes:

Flood Control and

Recreation

Watershed:

Neches River Basin

Watercourse:

Naconiche Creek, tributary of Attoyac Bayou, tributary of the Angelina River, tributary of the Neches River

WHEREAS, the County of Nacogdoches has requested authorization to construct and maintain a dam on Naconiche Creek creating a reservoir to be used for flood control and in-place recreation purposes in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas; and

WHEREAS, the dam will be constructed by the Natural Resource Conservation Service (NRCS) and is referred to as Multi-Purpose Structure No. 23-A; and

WHEREAS, the Texas Natural Resource Conservation Commission finds that it has jurisdiction over the application; and

WHEREAS, the Executive Director has determined that although there may be some anticipated temperature differences in Naconiche Creek resulting from the construction of the proposed reservoir, these differences will probably be dissipated downstream due to springflow, seepage and vegetative cover; and

WHEREAS, the Executive Director has determined and recommended that in order to protect habitat and water quality at the reservoir site and downstream of the dam, certain special conditions be included in the permit; and

WHEREAS, the Stephen F. Austin School of Forestry has agreed to manage and monitor a wetland area around the perimeter of the reservoir in accordance with a "Final Monitoring Plan" dated May 14, 1998 that states it is intended and predicted to result in the conversion of 176 acres of land owned by the permittee to hydric soil condition due to increased saturation, thereby allowing more than 50% of the dominant vegetation of the area to propagate into obligate wetland, facultative wetland or facultative plants; and

WHEREAS, the Commission has complied with the requirements of the Texas Water Code and Rules of the Texas Natural Resource Conservation Commission in issuing this permit.

NOW, THEREFORE, this permit to appropriate and use State water is issued to the County of Nacogdoches, subject to the following terms and conditions:

1. IMPOUNDMENT

Permittee is authorized to construct and maintain a dam creating a reservoir in Nacogdoches County approximately 13 miles northeast of Nacogdoches, Texas, on Naconiche Creek and to impound therein not to exceed 9072 acre-feet of water at a normal maximum operating elevation of 348.0 feet above mean sea level. The dam will be in the William C. Walker Survey, Abstract No. 596 and the Maria D. Castro Survey, Abstract No. 133 and Station 0+00 on the centerline of the dam at Latitude 31:7708° N and Longitude 94.5694° W, which is also N 27° W, 2650 feet from the southwest corner of the aforesaid Castro survey.

USE

Permittee is authorized to use the lake only for flood control and in-place recreational purposes with no diversion right.

3. TIME LIMITATIONS

- a. Construction of the dam herein authorized shall be commenced within two years and completed within five years from date of issuance of this permit. For the purposes of this permit, commencement of construction includes site preparation.
- b. Failure to commence and/or complete construction of the dam within the period stated above shall cause this permit to expire and become null and void, unless permittee applies for an extension of time to commence and/or complete construction prior to the respective deadlines for commencement and completion, and the application is subsequently granted.

4. SPECIAL CONDITIONS

- a. Permittee is responsible for the continuing maintenance and repair of the dam authorized herein.
- b. Permittee shall pass inflows of State water past the reservoir in such quantities as are necessary to satisfy the rights of downstream domestic and livestock users and the senior and superior rights of other authorized water users.
- c. In order to compensate for impacts to wetlands due to the construction of the aforesaid reservoir, permittee shall:
 - implement the mitigation plan developed and described in NRCS' draft and final "Supplemental Environmental Impact Statement for Attoyac Bayou Watershed in Nacogdoches, Rusk, Shelby and San Augustine Counties, Texas", which includes the purchase and preservation of an 852-acre tract of land (bottomland hardwoods) in the Angelina River Bottom;
 - ii. implement the May 14, 1998 "Final Monitoring Plan" for the "Lake Naconiche Created Wetlands" prepared by the permittee and the Stephen F. Austin School of Forestry, which includes monitoring and annual reporting to the Executive Director of the vegetation, soils and hydrology of approximately 176 acres of land owned by permittee around the perimeter of the proposed reservoir;
 - iii. achieve the <u>Minimum Success Criteria</u>" included on Page 4 of the referenced Final Monitoring Plan" for the 176 acres of land around the perimeter of the reservoir within ten years after initial filling of the proposed reservoir and provide a report to the Executive Director documenting this achievement; and
 - iv. manage the lands included in the mitigation plan and in the monitoring plan in perpetuity, either by permittee or by its designee, so as to insure that these lands have no use inconsistent with the preservation of wetlands and wildlife habitat.
 - d. To provide for instream habitats and to retain some natural hydrologic patterns of Naconiche Creek during the months of July through November all inflows into the reservoir up to 3 cubic feet per second (cfs) must be passed through the reservoir. During all other months, all inflows into the reservoir up to the following amounts must be passed through the reservoir:

December5 cfs	March15 cfs	June4 cfs
January8 cfs	April11 cfs	
February12 cfs	May9 cfs	

This permit is issued subject to all superior and senior water rights in the Neches 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 Natural Resource Conservation Commission and to the right of continuing supervision of State water resources exercised by the Commission.

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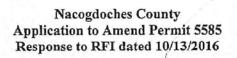
TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

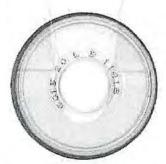
Issue Date:

JUL 03 1998

For the Commission

Attachment B Modeling Files WAM Analysis





Attachment B · November 14, 2016