# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# WATER USE PERMIT

PERMIT NO. 13728 TYPE §§ 11.121, 11.042, 11.085

Permittee: Lavaca Navidad River Authority Address: 4631 FM 3131

Edna, Texas 77957

Filed: July 10, 2020 Granted:

Purposes: Municipal, Industrial, and Mining Counties: Jackson, Calhoun,

Matagorda, Wharton and

Victoria

Watercourse: Lavaca River Watersheds: Lavaca River Basin,

Colorado-Lavaca Coastal Basin, and Lavaca-Guadalupe

Coastal Basin

WHEREAS, Lavaca-Navidad River Authority (LNRA/Permittee) seeks a water use permit (Permit) to construct and maintain a dam and reservoir impounding 240 acre-feet of water on the Lavaca River, Lavaca River Basin and to divert not to exceed 96,022 acre-feet of water per year from a diversion reach on the Lavaca River, at a maximum combined diversion rate of 309.4 cfs (138,868 gpm), for municipal, industrial, and mining purposes in Calhoun, Jackson, Matagorda, Wharton, and Victoria counties within the Lavaca River Basin and the Colorado-Lavaca and Lavaca-Guadalupe Coastal Basins; and

WHEREAS, water diverted from the Lavaca River will be subsequently discharged into the Navidad River (Lake Texana), Lavaca River Basin and/or into a proposed 50,000 acre-foot off-channel reservoir, located in the Colorado-Lavaca Coastal Basin in Jackson County; and

WHEREAS, the proposed 240-acre-foot dam and reservoir and the proposed diversion reach on the Lavaca River will be located between two points identified as Latitude 28.887744° N, Longitude 96.618490° W and Latitude 28.876220° N, Longitude 96.611804° W in Jackson County; and

WHEREAS, the proposed off-channel reservoir is identified by a point located at Latitude 28.777535° N, Longitude 96.497558° W in Jackson County; and

WHEREAS, LNRA also seeks authorization to use the bed and banks of the Navidad River (Lake Texana) to convey water diverted from the Lavaca River for subsequent diversion from the two existing diversion points on Lake Texana authorized by Certificate of Adjudication No. 16-2095, as amended, (Certificate) and from anywhere else on the perimeter of Lake Texana, at a maximum diversion rate of 660 cfs (296,227.8 gpm), in combination with the diversion rate authorized in the Certificate; and

WHEREAS, water diverted from the Lavaca River will be discharged at any point on the perimeter of Lake Texana identified by a point located at Latitude 28.889524° N, Longitude 96.578802° W in Jackson County; and

WHEREAS, the new diversion location on Lake Texana is anywhere along the perimeter of the lake, identified by a point located at Latitude 28.889524° N, Longitude 96.578802° W in Jackson County; and

WHEREAS, LNRA also seeks authorization to overdraft Lake Texana in an amount equal to the amount that could have been diverted from the Lavaca River when (1) Lake Texana is full and spilling, and (2) spills from Lake Texana exceed the Bay and Estuary Release Schedule in the Certificate; and

WHEREAS, LNRA requests recognition that water diverted from the Lavaca River and discharged into Lake Texana would not be considered natural inflows and subject to the Bay and Estuary Release schedule in the Certificate; and

WHEREAS, LNRA further seeks to reuse water diverted and used under the Permit, subject to identifying future specific points of discharge and diversion; and

WHEREAS, LNRA seeks a temporary authorization to divert and use not to exceed 1,500 acre-feet of water from the Lavaca River, Navidad River, and Keller Creek for industrial purposes in Jackson County for use during construction of the diversion structure and off-channel reservoir; and

WHEREAS, LNRA indicates that it will abandon the authorization in Certificate of Adjudication No. 16-2095, as amended, for the proposed Stage II reservoir and its associated diversion authorizations on the Lavaca River when Water Use Permit No. 13728 is granted; and

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

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

WHEREAS, LNRA has provided, and the Executive Director has approved the Lake Texana Enhanced Yield Project Accounting Plan; and

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

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

NOW, THEREFORE, this permit, designated Water Use Permit No. 13728, is issued to the Lavaca-Navidad River Authority subject to the following terms and conditions:

### 1. IMPOUNDMENT

- A. Permittee is authorized to construct and maintain a dam and reservoir impounding up to 240 acre-feet of water on the Lavaca River, Lavaca River Basin located between Latitude 28.887744° N, Longitude 96.618490° W and Latitude 28.876220° N, Longitude 96.611804° W in Jackson County.
- B. Permittee is authorized to maintain an off-channel reservoir impounding up to 50,000 acre-feet with a point on the reservoir located at Latitude 28.777535° N, Longitude 96.497558° W, Jackson County.

#### USE

### Permittee is authorized:

- A. To divert and use not to exceed 96,022 acre-feet of water per year from the Lavaca River for subsequent diversion and use for municipal, industrial, and mining purposes in Calhoun, Jackson, Matagorda, Wharton and Victoria counties within the Lavaca River Basin, Colorado-Lavaca Coastal Basin and the Lavaca-Guadalupe Coastal Basin.
- B. To use the bed and banks of the Navidad River (Lake Texana) to convey the 96,022 acre-feet of water per year for subsequent diversion and use.
- C. To store the diverted water in the off-channel reservoir described in Paragraph 1.B. IMPOUNDMENT.
- D. To overdraft Lake Texana in an amount not to exceed 96,022 acre-feet of water per year, subject to Paragraph 7.Q.
- E. An exempt interbasin transfer to those portions of Calhoun, Jackson, Matagorda, Wharton and Victoria counties within the Colorado-Lavaca and the Lavaca-Guadalupe Coastal Basins.
- F. To divert and use not to exceed 1,500 acre-feet of the authorized 96,022 acre-feet of water for industrial purposes during and for construction of the diversion structure and off-channel reservoir.

## DISCHARGE

Water will be discharged into Lake Texana at the perimeter of the lake, identified by a point located at Latitude 28.889524° N, Longitude 96.578802° W at a maximum combined discharge rate of 309.4 cfs (138,868 gpm).

# DIVERSION

- A. Permittee is authorized to divert from the following locations:
  - 1. A diversion reach on the Lavaca River with the upper limit located at Latitude 28.887744° N, Longitude 96.618490° W and the lower limit located at Latitude 28.876220° N, Longitude 96.611804° W.
  - 2. Two points on the Navidad River (Lake Texana), as authorized by Certificate of Adjudication No. 16-2095, as amended.
  - 3. The perimeter of Lake Texana, with the perimeter of the lake identified by a point located at Latitude 28.889524° N, Longitude 96.578802° W.
  - 4. From the Lavaca and Navidad Rivers and Keller Creek during and for construction of the diversion structure and off-channel reservoir subject to the requirements in Paragraph 7.W.
- B. Permittee is authorized to divert at the following rates:
  - 1. At a maximum combined diversion rate of 309.4 cfs (138,868 gpm) from the diversion reach on the Lavaca River.

 At a maximum combined diversion rate of 660 cfs (296,229 gpm), from Lake Texana in combination with diversions authorized by Certificate of Adjudication No. 16-2095.

## TIME PRIORITY

The time priority for the water right is July 10, 2020.

#### CONSERVATION

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

## SPECIAL CONDITIONS

- A. The authorizations in this permit are contingent upon Permittee filing an application to abandon the Stage II reservoir and its associated diversion authorizations described in Certificate of Adjudication No. 16-2095, as amended, when this permit is final and non-appealable.
- B. Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement at any new diversion structures. Such measures shall include, but shall not be limited to, the installation of screens at any new diversion structures.
- C. The instream flow requirements in Paragraphs 7.D. 7.O. below apply to impoundment of 240 acre-feet of water and diversion of 96,022 acre-feet of water from the Lavaca River on a perpetual basis and to the diversion of 1,500 acre-feet of water from the Lavaca and Navidad Rivers and Keller Creek on a temporary basis during and for construction of the diversion structure and off-channel reservoir.
- D. Permittee shall not divert or impound water unless streamflow exceeds the following environmental flow standards, plus the diversion rate at the time of the diversion, at USGS Gage No. 08164000 Lavaca River near Edna, Tx, subject to the requirements of Paragraphs 7.E. 7.O. below.

Season	Hydrologic Condition	Subsistence	Base	Small Seasonal Pulse (2 per season)	Large Seasonal Pulse (1 per season)	Annual Pulse
Winter	Severe	8.5 cfs	30 cfs	Trigger: 2,000 cfs Volume: 8,000 af Duration: 6 days	Trigger: 4,500 cfs Volume: 18,400 af Duration: 7 days	Trigger: 4,500 cfs Volume: 18,400 af Duration: 7 days
Winter	Dry	N/A	30 cfs			
Winter	Average	N/A	55 cfs			
Winter	Wet	N/A	94 cfs			

Season	Hydrologic Condition	Subsistence	Base	Small Seasonal Pulse (2 per season)	Large Seasonal Pulse (1 per season)	Annual Pulse
Spring	Severe	10 cfs	30 cfs	4,500 cfs Volume: 18,400 af Duration:	Trigger: 4,500 cfs Volume: 18,400 af Duration: 7 days	
Spring	Dry	N/A	30 cfs			
Spring	Average	N/A	55 cfs			
Spring	Wet	N/A	94 cfs			
Summer	Severe	1.3 cfs	20 cfs	88 cfs Volume: V 370 af Duration: I	Trigger: 420 cfs Volume: 1,800 af Duration: 6 days	
Summer	Dry	N/A	20 cfs			
Summer	Average	N/A	33 cfs			
Summer	Wet	N/A	48 cfs			
Fall	Severe	1.2 cfs	20 cfs	1,600 cfs 4, Volume: V 6,100 af 16 Duration: D	Trigger: 4,500 cfs Volume:	
Fall	Dry	N/A	20 cfs			
Fall	Average	N/A	33 cfs		18,000 af Duration:	
Fall	Wet	N/A	58 cfs		6 days	

cfs=cubic feet per second

af=acre-feet

N/A=not applicable

- E. Seasons are defined as follows: Winter (December through February), Spring (March through June), Summer (July through August), and Fall (September through November).
- F. The applicable instream flow requirement for diversions from the Lavaca River, Navidad River, and Keller Creek, impoundment in the 240-acre-foot reservoir, and any overdrafting operations in accordance with Paragraph 2. USE in this permit is based on storage in Lake Texana as follows:

Reservoir Elevation of Lake Texana	Applicable Instream Flow
(MSL)	Requirement
< 39.95	Severe
≥39.95 and ≤43.00	Dry
>43.00 and ≤44.00	Average
> 44.00	Wet

# **Subsistence Flow Special Conditions**

- G. Permittee shall not divert or impound water if streamflow at USGS Gage No. 08164000 is below the applicable subsistence flow standard for a season.
- H. If streamflow at USGS Gage No. 08164000 is above the applicable subsistence flow standard for a season but below the applicable dry condition base flow standard for a season, Permittee may only divert or impound water during severe hydrologic

conditions if streamflow does not fall below the applicable subsistence flow standard.

# Base Flow Special Condition

I. When streamflow at USGS Gage No. 08164000 is above the applicable base flow standard for a season but below all applicable pulse magnitude levels, Permittee may only divert or impound water if the streamflow at USGS Gage No. 08164000 does not fall below the applicable base flow standard.

## **High Flow Pulse Special Conditions**

- J. If streamflow at USGS Gage No. 08164000 is above the applicable subsistence or base flow standards and if an applicable pulse magnitude level is met, up to two small seasonal pulses per season, one large seasonal pulse per season, and one annual pulse, as described in Paragraph 7.D. must be allowed to pass USGS Gage No. 08164000. Once an applicable pulse magnitude level flow is met for a protected pulse at USGS Gage No. 08164000, Permittee shall not divert or impound water and must pass all inflows through the 240-acre-foot reservoir until the applicable duration time has passed since the pulse magnitude level flow occurred, or until the pulse volume requirement is met, except during times that streamflow at USGS Gage No. 08164000 exceeds the applicable pulse magnitude level. Once the required number of protected pulses has been passed during a season, diversion or impoundment are not limited during a pulse event.
- K. A pulse is a protected pulse if an applicable pulse magnitude level, as set out in Paragraph 7.D., is met at USGS Gage No. 08164000, and the applicable pulse requirement for the two small seasonal pulses per season, one large seasonal pulse per season, and one annual pulse has not been met.
  - i. The applicable pulse requirement for seasonal pulses is met for a season when one large and two small pulse events have been recorded at the USGS Gage No. 08164000 during the season, with each having a daily average flow at or above the pulse magnitude level for a continuous period of not less than the pulse duration or until the pulse volume requirement is met.
  - ii. The applicable pulse requirement for an annual pulse is met for a year when a pulse event has been recorded at USGS Gage No. 08164000 during the year, with a daily average flow at or above the pulse magnitude level for a continuous period of not less than the pulse duration or until the pulse volume requirement is met.
- L. If the applicable pulse magnitude level does not occur in a season, Permittee does not need to stop diverting or impounding water to produce a high flow pulse.
- M. Each season is independent of the preceding and subsequent seasons with respect to high flow pulse frequency.
- N. High flow pulses are independent of the applicable hydrologic condition.
- O. If a high flow pulse requirement for a large seasonal pulse is satisfied for a particular season, one of the small seasonal pulse requirements is also considered to be satisfied. When a pulse flow requirement for an annual pulse is satisfied in a particular season, the large seasonal pulse requirement and one of the small seasonal pulse requirements are also considered to be satisfied.
- P. Paragraphs 7.D 7.O are subject to adjustment by the commission if the commission determines, through an expedited public review process, that such

adjustment is appropriate to achieve compliance with applicable environmental flow standards adopted pursuant to Texas Water Code § 11.1471. Any adjustment shall be made in accordance with the provisions of Texas Water Code § 11.147(e-1).

- Q. Permittee is authorized to overdraft Lake Texana, in lieu of diverting water from the Lavaca River, when:
  - Lake Texana is full and spilling;
  - ii. Outflows from Lake Texana meet or exceed the Bay and Estuary Release Schedule in Certificate of Adjudication No. 16-2095, as amended;
  - iii. Water would be available for diversion from the Lavaca River because the environmental flow requirements at USGS Gage No. 08164000 Lavaca River near Edna have been satisfied; and
  - iv. Water overdrafted from Lake Texana shall be accounted for against the 96,022 acre-feet of water authorized for diversion from the Lavaca River under this permit.

Water diverted from the Lavaca River and discharged into Lake Texana is not considered to be natural inflow to Lake Texana for purposes of determining the required Bay and Estuary Release Schedule required in Certificate of Adjudication No. 16-2095, as amended, and is not subject to that release schedule.

- R. Diversions under this permit are limited to 96,022 acre-feet of water within any given twelve-month period.
- S. Impoundment of water in the 240-acre-foot reservoir shall not be accounted for against the 96,022 acre-feet of water per year authorized in this permit.
- T. Permittee shall only impound and divert water and conduct its overdrafting operations as authorized by this permit in accordance with the most recently approved Lake Texana Enhanced Yield Project Accounting Plan. Permittee shall maintain said plan in electronic format and make the data available to the Executive Director upon request. Any modifications to the Lake Texana Enhanced Yield Project Accounting Plan shall be approved by the Executive Director. Any modification that changes the permit terms must be in the form of an amendment to the permit. Should Permittee fail to maintain the accounting plan or notify the Executive Director of any modifications to the plan, Permittee shall immediately cease any diversions authorized in Paragraph 2. USE, and either resume maintenance of the accounting plan, apply to amend the permit, or voluntarily forfeit the permit. Permittee shall immediately notify the Executive Director of any modifications to the accounting plan and provide the appropriate documents effectuating such changes.
- U. Prior to the reuse of the return flows attributable to diversion of water authorized under this permit, Permittee shall apply for and be granted an amendment to identify all specific points of discharge and diversion and secure the appropriate authorizations to convey such return flows through state watercourses pursuant to Texas Water Code § 11.042, except to the extent such points of discharge, diversion, and conveyance may be authorized by any existing or future separate grant of authority from the Commission.
- V. Within ten years of issuance of this permit, and prior to impoundment of water diverted hereunder in the off-channel reservoir, Permittee shall either: (a) notify the Executive Director that the authorized off-channel reservoir as proposed in the plans filed with the application will be used for storage of water diverted under this

permit and identify the specific location of the reservoir; or (b) submit a detailed statement and plans under Texas Water Code  $\S$  11.144 for alterations and changes to the plans submitted with the application, including identifying the location of the off-channel reservoir; or (c) file an application to extend the time for submitting a detailed statement and plans modifying the plans submitted with the application under Texas Water Code  $\S$  11.144 as described under item (b) of this special condition.

- W. Permittee shall notify the South Texas Watermaster prior to diversion and use of the 1,500 acre-feet of water for industrial purposes and identify specific points of diversion and diversion rates.
- X. Permittee shall install and maintain a measuring device which accounts for, within 5% accuracy, the quantity of water diverted from the points authorized above in Paragraph 4. DIVERSION.
- Y. Permittee shall allow representatives of the South Texas Watermaster reasonable access to the property to inspect the measuring device and accounting plan.

## 8. TIME LIMITATIONS

- A. Construction of the dam on the Lavaca River must be in accordance with the plans and specifications approved by the Executive Director. Construction of the facility without final approval of the plans and specifications is a violation of this authorization.
- B. Construction shall begin within two years of issuance of this permit and shall be completed within four years of issuance of the permit, unless Permittee applies for and is subsequentially granted an extension of time before the expiration of these time limitations.
- C. Failure to commence construction within the period stated above may subject this permit to forfeiture, subject to notice and hearing. After beginning construction, failure to timely construct the dam on the Lavaca River may subject this permit to cancellation in whole or in part, subject to notice and hearing.

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

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

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

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

	For the Commission	
Date Issued:		