



March 28, 2023

Senator Brian Birdwell, Chairman
Natural Resources & Economic Development Committee

Senator Charles Schwertner, author of SB 1397

Senator Lois Kolkhorst, committee member

VIA ELECTRONIC EMAIL FILING

RE: ES comments ON TCEQ Sunset ON SB 1397: Comments regarding our review of TCEQ's Integrated Assessments and Anti-Degradation determinations used to justify continued permitting of wastewater and stormwater disposal in Segment 1428 of the Colorado River below Austin; TCEQ, A Reluctant Regulator .

Dear Chairman Birdwell, Senator Schwertner, and Committee Members:

I am writing you to share our findings regarding the Integrated Assessments and Anti-Degradation determinations being used by TCEQ to justify continued permitting of wastewater and stormwater disposal in Segment 1428 of the Colorado River below Austin, and to urge that the Committee strengthen the language in SB 1397 to fully incorporate the concerns raised by the Delegation Petition currently before the Environmental Protection Agency, Region 6 as discussed with you by Mr. Eric Allmon.

Since I am unable to attend the hearing on this bill due to medical considerations, I authorize Mr. Allmon to speak on behalf of Environmental Stewardship should you have questions.

These comments on the above referenced application are being submitted on behalf of Environmental Stewardship and its members to shed light on our concern for the need for TCEQ's to be more transparent in its assessments of the ecological health of Segment 1428 between Austin and the TX Hwy 969 bridge over the Colorado River near Utley, Texas, and the need that the burden of proof regarding such concerns be on the TCEQ, and not on the protestant, in order to be fully compliant with federal delegation of its authority.

We further believe that the actions by TCEQ in this matter demonstrate the characterization by the Sunset Committee that TCEQ is a "reluctant regulator" -- having *not collected* the data that would likely throttle back disposal of wastewater into this segment of the river, while management strategies would have been implemented.

These water quality assessments form the basis for determining if the segment is meeting the exceptional standards for Aquatic-Life use before permitting new or additional disposal of treated wastewater from municipal and industrial sources into the river. Our specific concern is whether TCEQ has adequately and properly managed the process of determining whether this segment of the river is meeting the Aquatic-life use standards, or whether the segment is falling short of meeting this standard and should be under a management plan to remedy the impairments that have been listed as concerns for over 17 years.

Though there is no record of adequate scientific data having been collected to make this determination, as of July 7, 2022, these concerns have been de-listed, clearing the way for further disposal of wastewater into the segment without having made the appropriate biological and ecological determinations necessary or informing our members and the public in a transparent manner. As such, we are not confident that the TCEQ can make an affirmative finding that this segment *is in compliance* with the exceptional Aquatic-Life use standards, but rather should have these standards under a management practice such as provided by Section 303(d) of the Clean Water Act.

In preparing comments filed to the TCEQ regarding two wastewater treatment plant permit applications, Environmental Stewardship reviewed the Integrated Assessment Reports published by TCEQ in 2006, 2008, 2010, 2020, and 2022 for in Segment 1428 of the Colorado River. The applicants were Corix/McKinney Roughs Park WWTP permit application WQ0013977001, and Gapped Bass LLC/The Boring Company WWTP permit application WQ0005397000. Together a total of 642,000 gallons per day of wastewater is being requested for disposal into this segment of the Colorado River.

The Aquatic-Life use standard set by statute for this segment of the river is EXCEPTIONAL. The segment is also designated for Recreational and Drinking Water use.

The following reflects our findings regarding the past and current status of this segment of the Colorado River, thus raising our concern about how this process has been managed by TCEQ.

Integrated Water Quality Reports & Anti-Degradation Reviews

It has become clear to persons that use and recreate on this reach of the river that the water quality and ecology of the Colorado River below Austin have been degrading over the past decade and are likely impaired. Two segments (1428 and 1434), that have the highest aquatic and recreational use standards in the state, are falling short of meeting the standards set in the 1980's and early '90's and updated in 2018. (TAC, Title 30, Chapter 307.10(1), Appendix A - pages 29-31.)

Environmental Stewardship *strongly* objects to TCEQ's ongoing statement that Segment No. 1428 of the Colorado River *is not currently listed on the State's inventory of impaired and threatened waters* (the 2022 CWA § 303(d) list) since *this statement implies that the river is meeting exceptional standards*. To the contrary, there are numerous citations of ecological/biological, physical, and chemical impairment concerns that have been repetitively listed for this section of the river since 2006 and earlier. The evidence shows that for more than

17 years concerns have been raised about impairment of fish and macrobenthic communities, as well as physical and chemical that *do not support water quality standards*, yet these concerns have not been adequately investigated.

Environmental Stewardship asserts that segment 1428 *is likely impaired* according to the 2020 and 2010, 2008, and 2006 Texas Integrated Reports, and should either be on the 303(d) list of impaired streams, or assumed to be impaired, and *should be subject of management strategies to remedy the impairments and a proper anti-degradation review*.

In reviewing the 2020 Texas Integrated [Assessment] Report¹ for the Colorado River (Basin 14) it is clear that concern for impaired fish and macrobenthic communities in these segments of the river may not only be currently impaired, but many of these impairments are carried forward from the 2006 report "*due to inadequate data for this method of assessment*".

Even more concerning is that many of the impairments that were listed in the 2020 report, were *de-listed on July 7, 2022*, after new guidelines were adopted.² No justification for these de-listings is found in the record. Attachments 1 and 2.

Environmental Stewardship is seeking to get clarification from TCEQ on this matter in relation to the two permit applications pending before the TCEQ. However, we have not, as of this writing, been able to get the clarification needed to remedy our concerns.

Environmental Stewardship and its Members.

Environmental Stewardship is a Texas non-profit that works to protect the Colorado River, Matagorda Bay, and the Carrizo-Wilcox Aquifer group in the lower basin. Environmental Stewardship has members who own property adjacent to and near the irrigation field and outfall to the river and have drinking water and/or irrigation wells downgradient from the proposed land disposal spray field, who would be adversely affected by the proposed discharges. They also have concerns about the level of nuisance conditions, such as noise, and light, and the potential increase in insect vectors of disease, such as mosquitos. Moreover, these and other Environmental Stewardship members are concerned about the overall ecological health of the Colorado River, its tributaries, and the aquifers of the region.

For example, one member with property adjacent to The Boring Company/Gapped Bass LLC property, has an exempt irrigation well within approximately 1300 feet of the proposed sprayfield that went dry and burned out the pump soon after The Boring Company started operations. The landowner also has two other exempt domestic wells that source drinking water from an aquifer in near proximity of the sprayfield. Other landowners have domestic wells in the region that draw water from the aquifers, including the Colorado Alluvial Aquifer, that exchanges water with the river and the Calvert Bluff, Simsboro, and Hooper Aquifers of the Wilcox Group.

¹ The Texas Integrated Report describes the status of the state's waters, as required by Sections 305(b) and 303(d) of the federal Clean Water Act. It summarizes the condition of the state's surface waters, including concerns for public health, fitness for use by aquatic species and other wildlife, and specific pollutants and their possible sources. <https://www.tceq.texas.gov/waterquality/assessment/20twqi>

² 2022 Guidance for Assessing and Reporting Surface Water Quality in Texas, July 7, 2022.

Another member with adjacent property has a domestic well that his family depends on for domestic use, and has experienced nuisance noise, night light, traffic, and unauthorized expansions of TBC operations.

Other members have a certified-organic farm on Wilbarger Bend across the river from TBC's operations and depend on wells in the Colorado Alluvial Aquifer (CAA) to irrigate their crops and to retain their certified-organic status. They are concerned about the impact of TBC's land application of wastewater that might likely contaminate the quality of water available for their organic farming operations and the potential of direct disposal into the river that would likely contaminate their well.

Other members down river from TBC's operations are concerned about potential contamination of their groundwater well as a result of continuing degradation of the water quality in the river that can result in contamination of shallow aquifers.

Other members landowners with riparian rights down river from The Boring Company are concerned about potential contamination of surface water of the Colorado River, and the alluvial aquifer, as a result of degradation of the water quality in the river, and the alluvial aquifer, due to direct discharge, and potential contamination that will likely result from the proposed permit application.

Requests

As a result of our concerns, Environmental Stewardship has respectfully requested that the TCEQ provide a full and transparent accounting of the scientific data that has (or has not) been collected over the past 17+ years. We further request that the Legislature hold TCEQ to higher standards than have been and are currently being practiced.

That TCEQ

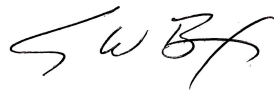
- (1) be directed to conduct such biological assessment studies as are necessary to adequately assess and take remedial actions where needed to reverse the degradation of these segments of the Colorado River and elsewhere in the state, especially as such relate to the possible impairment of Fish and Macrobenthic communities;
- (2) be directed to reexamine its decision regarding its standing anti-degradation reviews on the receiving waters (Tier 1 and 2), and the studies that underlay these reviews, to determine the current status of impaired fish and macrobenthic communities resulting from nitrogen, total phosphates, and other impairments in the segments 1428 and elsewhere in the state, and report these results in a transparent manner to stakeholders and the public that makes clear that such justifications are based on best available science;
- (3) that the burden of proof be rightfully placed on the Applicant and the Commission to prove that concerns and issues brought up before the Commission are in accordance with the federal laws that have been delegated to the State; and

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(4) be directed to be fully transparent to provide stakeholders and the public with adequate, full, and timely notice (both physically and electronically) of proposed actions, and such information and documents necessary for stakeholders and the public interest to be able to review and respond to such proposed actions be timely and efficiently provided the without delays (avoiding Public Information Requests where possible).

Thank you for your consideration of our concerns in drafting the legislation to guide TCEQ in such matters in the immediate and near future. If you have any questions regarding these comments, please feel free to contact me.

Respectfully submitted,



Steve Box
Executive Director
Environmental Stewardship
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ATTACHMENT 1 - WATER QUALITY ASSESSMENT REPORTS: SUPPORTING EVIDENCE & TIMELINE

ATTACHMENT 2 - [EXHIBITS SUPPORTING ENVIRONMENTAL STEWARDSHIP'S SUPPORTING EVIDENCE AND TIMELINE](#) Link to https://www.environmental-stewardship.org/wp-content/uploads/2023/03/Exhibit_1-4_Compiled_21Feb23_OPTIMIZED.pdf

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Environmental Stewardship is a nonprofit organization whose purposes fall under the following categories: Public Policy - Aiming to protect, conserve, restore, and enhance the earth's natural resources in order to meet current and future needs of the environment and humans; Science & Ecology - Gathering and using scientific information to restore and sustain ecological services provided by environmental systems; and Outreach & Education - Providing environmental education and outreach that encourages public stewardship. We are a Texas nonprofit 501(c) (3) charitable organization. For more information visit our website at <http://www.environmental-stewardship.org/>.

ATTACHMENT 1

Supporting evidence for issues raised by Environmental Stewardship in comments to TECQ regarding Gapped Bass/The Boring Company, and Corix/McKinney Roughs wastewater TPDES permit applications

SUMMARY

Fish and Macrobenthic Communities have been TCEQ listed¹ as "impaired ... in water" as "TCEQ cause[s]" for concern in numerous Assessment Units (AUID) of Segment 1428 since before 2006² when they were carried forward from the previous assessment. Both are "use concerns" (CN³) based on "inadequate data (less than 4)" (ID). The methods of assessment for these parameters for Aquatic Life Use were listed in 2020 as "regional" and "qualitative", respectively.

These two biological parameters of concern that relate to aquatic life use have been carried forward for at least 17 years without having been further evaluated to determine whether to rate them as fully supporting (FS), nonsupport (NS), or no concern (NC).

Fish Community, as an Aquatic Life Use Method, and the lower segment of the Colorado River, were *delisted* from the July 7, 2022,⁴ TCEQ Water Quality Report⁵. Dissolved oxygen concerns in the upper segment of the Colorado river were also *delisted* from the same report.

NOTE: Segment 1428 was included in "*intensive biological and physical data collection activities conducted in 2004-2007*" and reported in 2008⁶. Aquatic habitat and use data were collected at 10 sites from Longhorn Dam to Wharton. Fifty (50) species of fish⁷ were collected in the entire lower basin.

Nutrient screening for Nitrate and Total Phosphate have been TCEQ listed as General Use "in water" "TCEQ cause" of concern based on the concentration levels that these compounds are found in water. (See Documents cited in footnotes 1 and 2). Neither have been carried forward from previous assessments. Both are "screening level concerns" (CS) based on adequate data (AD). The method of assessment for these General Use parameters have been by Nutrient Screening Levels. Orthophosphorus was listed in this group until 2020.

¹ 2020 Texas Integrated Report - Assessment Results for Basin 14 - Colorado River Basin, Segment 1428, page 183 of 242.

² 2006 Texas Water Quality Inventory - Basin Assessment Data By Segment, Segment 1428, Page 1 of 7; 2008 Texas Water Quality Inventory - Basin Assessment Data based on Segment (March 19, 2008) page 1 of 5; 2010 Water Quality Inventory: Assessment Results for Basin 14 - Colorado River (page 280 - 297).

³ From 2006 to 2008 CN was listed as "Concern for Near non-attainment" until changed in 2010 to "Use Concern".

⁴ TCEQ SFR-127, 2022 Guidance for Assessing and Reporting Surface Water Quality in Texas, was adopted July 7, 2022.

⁵ See: Timeline and Exhibits in Support of Evidence for Issues raised by Environmental Stewardship in comments to TCEQ regarding Gapped Bass/The Boring Company, and Corix/McKinney Roughs wastewater TPDES Permit Applications and Draft Permits.

⁶ Colorado and Lavaca Rivers and Matagorda and Lavaca Bays Basin and Bay Expert Science Team (CL-BBEST) Environmental Flow Regimes Recommendations Report, March 1, 2011.

⁷ Surface Water Quality Monitoring Procedures, Volume 2: Appendix B: Greater than or equal to 52 fish species are needed to support the exceptional aquatic-life use standard for fish (Metric for Ecoregion 30 (Table B.6.) and greater than or equal to 42 species for Ecoregion 31 Table B.7.).

Both have been chemical parameters of concern for at least 17 years but continue to be assessed and included because the data indicates an ongoing concern that is short of being characterized as nonsupport (NS) that would trigger a Category 5c response. The Nitrate and Total Phosphate concerns in lower segment of the Colorado River were also *delisted* from the July 7, 2022, TCEQ Water Quality Report.

Category 5c concerns, like bacteria in this Segment, are included on the 303(d) list and require additional data or information to be collected and/or evaluated for one or more parameters before a management strategy, normally TMDLs for chemical parameters, is selected.

CONCLUSIONS

Fish and Macrobenthic Communities have been a TCEQ cause based on impairment in water concerns that have not been investigated for at least 17 years by collecting biological field data to determine whether to rate them as fully supporting (FS), nonsupport (NS), or no concern (NC).

Without a holistic biological assessment of these biological indicators of the status of aquatic life use, there is no ability for TCEQ, or the public, to determine whether management strategies for constituents in discharges to this segment of the river -- such as nitrogen and total phosphate -- are degrading the water quality in this Colorado River segment to an extent that the aquatic life use has also been degraded, or not degraded.

The Executive Director has asserted,

"no significant degradation of water quality is expected in the Colorado River below Lady Bird Lake/Town Lake which has been identified as having exceptional aquatic life use",

That assertion for both the Tier 1 and Tier 2 antidegradation review cannot be reliably concluded given the uncertainty in the data and the agency's levels of evaluations of the conditions in the River below Lady Bird Lake/Town Lake.

Issues Raised: To be included in issue lists in comments on Gapped Bass/The Boring Company, and Corix/McKinney Roughs wastewater TPDES permit applications.

- a) Whether the evaluation of impacts properly considers current conditions and complies with applicable regulations to ensure the draft permit is protective of water quality, including utilizing accurate assumptions and inputs, e.g., proper evaluation of the current state of pollutants in and impairments of the Colorado River downstream of the discharge in a manner that considers the total loading on the river.
- b) Whether the Executive Director's antidegradation review was accurate, e.g., proper evaluation of the current state of pollutants in, and impairments of, the Colorado River downstream of the discharge, proper use of the historic measuring period for evaluation of degradation and proper evaluation of the degradation standard:
 - a. Whether impairments in Segment 1428, AUID: 1428_0 have been timely field studied using biological metrics, monitored, and assessed by TCEQ, based on TCEQ, TPWD, or LCRA data collected since originally assessed in 2006 to determine if the segment should be on the 303(d) list based on impairment of fish and microbenthic communities, nitrogen, and phosphorus or if the removal of these causes for impairment were justifiably based on best-available science.

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

SUMMARY

Fish Community:

- 2006 Concern for Near non-attainment (CN)
- 2010 Use Concern (CN)
- 2022 **Fish Community as an Aquatic Life Use Method was Delisted (July 7, 2022)**

Macrobenthic Community:

- 2006 Concern for Near non-attainment (CN)
- 2010 Use Concern (CN)
- 2006 Colorado River, lower segment
- 2008 Walnut Creek added
- 2022 **Colorado River delisted from this Aquatic Life Use Method (July 7, 2022)**

Dissolved Oxygen:

- 2020 New Method Added
Colorado River, Walnut Creek to Longhorn Dam (CS) (May 31, 2020)
- 2022 **Colorado River, Walnut Creek to Longhorn Dam delisted (July 7, 2022)**

Habitat:

- 2020 New Method Added
Walnut Creek

Nitrate:

No. Listings

- | | | |
|------|---|--------------|
| 2006 | 1 | |
| 2008 | 2 | |
| 2010 | 3 | |
| 2020 | 6 | May 31, 2020 |
| 2022 | 5 | July 7, 2022 |
- Colorado River lower segment delisted**

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

SUMMARY (continued)

<u>Orthophosphorus:</u>	<u>No. Listings</u>
2006	2
2008	2
2010	3
2020	0

<u>Total Phosphates:</u>	<u>No. Listings</u>
2006	1
2008	2
2010	3
2020	2
2022	1

May 31, 2020

July 7, 2022

Colorado River lower segment delisted

<u>Bacteria Single Sample:</u>	<u>No. Listings</u>	<u>Concern</u>
2006	1	
2008	2	CN
2010	1	CN
	1	NS
2020	0	May 31, 2020
2022	0	July 7, 2022

<u>Bacteria Geomean:</u>	<u>No. Listings</u>	<u>Concern</u>
2006	1	
2008	2	CN
	2	NS
	4	5c
2010	3	CN
	5	5c
2020	3	CS May 31, 2020
	3	4a May 31, 2020
2022	2	CN July 7, 2022
	4	4a July 7, 2022

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

2006 - Report from TCEQ website (see attached Exhibit 4)

- **Assessment Data (7 TCEQ Causes Listed)**

○	Fish Community 1428_01	Concern for Near non-attainment (CN) Colorado River, Lower end of segment to Gilleland Creek	Carry Forward
○	Macrobenthic Community- 1428_01	Concern for Near non-attainment (CN) Colorado River, Lower end of segment to Gilleland Creek	Carry Forward
○	Nitrate 1428_01	Concern for Screening level (CS) Colorado River, Lower end of segment to Gilleland Creek	No
○	Orthophosphorus 1428_01 1428_02	Concern for Screening level (CS) Colorado River, Lower end of segment to Gilleland Creek Colorado River. Gilleland Creek to Walnut Creek	No
○	Total Phosphorus 1428_01	Concern for Screening level (CS) Colorado River, Lower end of segment to Gilleland Creek	No
○	E. coli 1428_03	Non-Supporting (NS), Impaired Category 5c Walnut Creek to Longhorn Dam	No

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

2008 - Reports from TCEQ website (see attached Exhibit 3)

- **Integrated Report - Not Available on TCEQ website**

- **Assessment Data - 20 TCEQ Causes Listed**

- Fish Community Concern for Near non-attainment (CN) Carry Forward
1428_01 Colorado River, Lower end of segment to Gilleland Creek

- Macrobenthic Community- Concern for Near non-attainment (CN) Carry Forward
1428_01 Colorado River, Lower end of segment to Gilleland Creek
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1

- Nitrate Concern for Screening level (CS) No
1428_01 Colorado River, Lower end of segment to Gilleland Creek
1428C_01 Gilleland Creek, From Colorado River upstream to Taylor Lane
1428C_02 Gilleland Creek, From Taylor Lane upstream to Old Hwy 20

- Orthophosphorus Concern for Screening level (CS) No
1428_01 Colorado River, Lower end of segment to Gilleland Creek
1428C_01 Gilleland Creek, From Colorado River upstream to Taylor Lane

- Total Phosphorus Concern for Screening level (CS) No
1428_01 Colorado River, Lower end of segment to Gilleland Creek

- Bacteria Single Sample Concern for near non-attainment (CN) No
1428_03 Colorado River, Walnut Creek to Longhorn Dam
Fecal coliform
1428C_01 Gilleland Creek, From Colorado River upstream to Taylor Lane

- Bacteria Single Sample Non-Supporting (NS), Impaired Category 5c No
1428B_05 Walnut Creek, From MoPac upstream to RR west of Loop 1
E. coli

- Bacteria Geomean Concern for near non-attainment (CN) No
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1
E. coli
1428B_05 Walnut Creek, From MoPac upstream to RR west of Loop 1
E. coli

- Bacteria Geomean Non-Supporting (NS) No
1428_03 Colorado River, Walnut Creek to Longhorn Dam
Fecal coliform
1428C_01 Gilleland Creek, From Colorado River upstream to Taylor Lane
Fecal coliform

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

- Bacteria Geomean Non-Supporting (NS), Impaired Category 5c No
- 1428_03 Colorado River, Walnut Creek to Longhorn Dam
 E. coli
- 1428B_01 Walnut Creek, From Colorado River upstream to FM 969
 Fecal coliform
- 1428B_03 Walnut Creek, From old Manor Rd. upstream to Dessau Rd.
 Fecal coliform
- 1428C_01 Gilleland Creek, From Colorado River upstream to Taylor Lane
 E. coli

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

2008 - Reports from TCEQ (continued)

- **Water Bodies Evaluated**

- Colorado Below Town Lake Assessed in 2008 TWQS-Appendix A
- Walnut Creek Assessed in 2008 Presumption from
Flow Type
- Gilleland Creek Assessed in 2008 Presumption from
Flow Type

- **Colorado River Below Town Lake**

- Colorado River, Walnut Creek to Longhorn Dam Category 5c Bacteria
Not Carried Forward
- Walnut Creek Category 5c Bacteria Not Carried Forward
- Gilleland Creek Category 5c Bacteria Not Carried Forward

- **303(d) List**

- Bacteria Colorado River Category 5c First Listed 2006
- Bacteria Walnut Creek Category 5c First Listed 2006
- Bacteria Gilleland Creek Category 5c First Listed 1999

- **Water Bodies and Impairments Added to 303(d) List**

- None added for Segment 1428

- **Water Bodies and Parameters Removed from 303(d) List**

- None removed for Segment 1428

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

2010 - Report from TCEQ - 18 TCEQ Causes Listed, 4 Screening Level Concerns wo/Cause Listed (See Attached Exhibit 2)

- Fish Community (Regional) Use Concern (CN) Carry Forward
1428_01 Colorado River, Lower Segment to Gilleland Creek

- Macrobenthic Community (Qualitative) Use Concern (CN) Carry Forward
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1

- Nitrate Screening Level Concern(CS) No
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428_02 Colorado River, Gilleland Creek upstream to Walnut Creek
1428C_01 Gilleland Creek, From CR upstream to Taylor Lane
1428C_02 Gilleland Creek, From Taylor Lane upstream to Old Hwy 20

- Orthophosphorus Screening Level Concern(CS) No
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428_02 Colorado River, Gilleland Creek upstream to Walnut Creek
1428C_01 Gilleland Creek, From CR upstream to Taylor Lane

- Total Phosphorus Screening Level Concern(CS) No
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428_02 Colorado River, Gilleland Creek upstream to Walnut Creek

- Bacteria Single Sample Screening Level Concern (CS) No
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1

- Bacteria Single Sample Nonsupport (NS) No
1428B_05 Walnut Creek, From MoPac/Loop 1 upstream to RR. west of Loop 1

- Bacteria Geomean Screening Level Concern (CS) No
1428B_01 Walnut Creek, From Colorado River upstream to FM 969
1428B_02 Walnut Creek, From FM969 to Old Manor Rd.
1423B_03 Walnut Creek, From Old Manor Rd. upstream to Dessau Rd.

- Bacteria Geomean Nonsupport (NS), Category 5c No
5c: Additional data and information will be collected before a TMDL is scheduled
1428_03 Colorado River, Walnut Creek to Longhorn Dam
1428B_05 Walnut Creek, From MoPac/Loop 1 upstream to RR. west of Loop
1428C_01 Gilleland Creek, From CR upstream to Taylor Lane
1428C_03 Gilleland Creek, From Old Hwy 20 to Cameron Rd.

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428**

-- impairments listed since 2006 in the Texas Integrated Reports --

1428C_04 Gilleland Creek, From Cameron Rd to the spring source
2020 - Reports from TCEQ (see attached Exhibit 1)

May 31, 2020, Report (19 TCEQ Causes Listed)

- Fish Community (Regional) Use Concern (CN) Carry Forward
1428_01 Colorado River, Lower Segment to Gilleland Creek
- Macrobenthic Community (Qualitative) Use Concern (CN) Carry Forward
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1
- Nitrate Screening Level Concern(CS) No
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428_02 Colorado River, Gilleland Creek upstream to Walnut Creek
1428C_01 Gilleland Creek, From CR upstream to Taylor Lane
1428C_02 Gilleland Creek, From Taylor Lane upstream to Old Hwy 20
1428C_03 Gilleland Creek, From Old Hwy 20 to Cameron Rd.
1428C_04 Gilleland Creek, From Cameron Rd to the spring source
- Total Phosphorus Screening Level Concern(CS) No
1428_01 Colorado River, Lower Segment to Gilleland Creek
1428_02 Colorado River, Gilleland Creek upstream to Walnut Creek
- Dissolved Oxygen Screening Level Concern(CS) No
1428_03 Colorado River, Walnut Creek to Longhorn Dam
- Bacteria Geomean Screening Level Concern(CS) Carry Forward
1428B_02 Walnut Creek, From FM969 to Old Manor Rd.
1428B_04 Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1
1428C_01 Gilleland Creek, From CR upstream to Taylor Lane Bacteria
Geomean Nonsupport (NS), Category 4a No
4a: ALL TMDLs have been completed and approved by EPA
1428B_05 Walnut Creek, From MoPac/Loop 1 upstream to Union Pacific
RR. south of McNeil Drive
1428C_03 Gilleland Creek, From Old Hwy 20 to Cameron Rd.
1428C_04 Gilleland Creek, From Cameron Rd to the spring source
- Habitat **New Method** Screening Level Concern(CS) Carry Forward
1428B_03 Walnut Creek, From Old Manor Rd upstream to Dessau Rd.

**Timeline for Listing and Assessment of Colorado River (Basin 14)
Segment 1428
-- impairments listed since 2006 in the Texas Integrated Reports --**

2020 - Reports from TCEQ (continued)

July 7, 2022, Report (14 TCEQ Causes Listed)

- **Macrobenthic Community (Qualitative)**

	Use Concern (CN)	Carry Forward
1428B_04	Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1	

- Nitrate

	Screening Level Concern(CS)	No
1428_02	Colorado River, Gilleland Creek upstream to Walnut Creek	
1428C_01	Gilleland Creek, From CR upstream to Taylor Lane	
1428C_02	Gilleland Creek, From Taylor Lane upstream to Old Hwy 20	
1428C_03	Gilleland Creek, From Old Hwy 20 to Cameron Rd.	
1428C_04	Gilleland Creek, From Cameron Rd to the spring source	

- Total Phosphorus

	Screening Level Concern(CS)	No
1428_02	Colorado River, Gilleland Creek upstream to Walnut Creek	

- Bacteria Geomean

	Use Concern(CN)	Carry Forward
1428B_02	Walnut Creek, From FM969 to Old Manor Rd.	
1428C_04	Walnut Creek, From Dessau Rd. upstream to MoPac/Loop 1	

- Bacteria Geomean

	Nonsupport (NS), Category 4a	No
4a: A state-developed TMDL has been approved by EPA or TMDL has been established by EPA for any water-pollutant combination.		
1428B_05	Walnut Creek, From MoPac/Loop 1 upstream to Union Pacific RR. south of McNeil Drive	
1428C_01	Gilleland Creek,	
1428C_03	Gilleland Creek, From Old Hwy 20 to Cameron Rd.	
1428C_04	Gilleland Creek, From Cameron Rd to the spring source	

- **Habitat**

	New Method Screening Level Concern(CS)	Carry Forward
1428B_03	Walnut Creek, From Old Manor Rd upstream to Dessau Rd.	