Meeting Summary North Bosque River TMDL Work Group Meeting March 30, 10:30 a.m. – 12:00 p.m. (3rd meeting)

Welcome and Introductions

TCEQ's Louanne Jones briefly welcomed work group members and then turned the floor over to Earl Lott, Office of Water Director.

TCEQ Monitoring and Recommendations in FY22 and FY23

Director Lott shared TCEQ's recommendations for revisions to the monitoring schedules for FY22 and 23. TCEQ shared a map showing the location of the seven stations currently being monitored.

- **FY22** Reduce the number of events at all sites to monthly (12 per year). Maintain stormwater monitoring at up to four events per year.
- **FY23** Reduce the number of events at five of the stations to bi-monthly (6 per year), provided no abnormalities are observed from changing monitoring frequencies in FY22. Continue monthly monitoring at Stations 17226 (Upper North Bosque River above Stephenville) and 13486 (Green Creek). Maintain stormwater monitoring at up to four events per year.

Monitoring might be reduced further in future years, depending on what we observe from changing the monitoring frequencies in FY22 and FY23.

There being no objections stated, the recommendations were assumed to be accepted by the work group.

Discussion of Viability of Station 17226 above Stephenville

Jill Csekitz of TCEQ summarized TCEQ's reasons for continuing monitoring at Station 17226, and maintaining monthly monitoring at 17226 and 13486 in FY23. TCEQ's review of data indicated that TIAER staff have been able to collect samples because the stream was flowing at about 70% of sampling events at 17226 over the period 2013-2019. This indicates the station is not dry, but intermittent with perennial pools, as was indicated by an earlier use attainability analysis (UAA) of Assessment Unit (AU) 1255_02. She noted that stations 17226 and 13486 were the only two stations that monitor improvement due primarily or only to nonpoint sources. She also noted that there were slight but significant reductions in orthophosphate-phosphorus in stormwater at Station 17226 in 2019, 2018, and 2017, based on recent analysis.

Dan Opdyke asked whether improvement in stormwater loads was from the TIAER trends report. Jill replied yes, and said she would send specific references to the information in the TIAER report to Louanne to forward to the work group.

Jim Bradbury asked what about observations from last meeting about Station 17226 being often dry. Jill replied that data review indicates that streamflow was observed at events throughout the year, including the warm-season index period.

Jennifer Bronson asked if the recommendations for reduced monitoring would impact the number of samples available for assessment. Louanne Jones noted that TCEQ would be formalizing the designation of assessment unit (AU) monitored at Station 17226 as intermittent with perennial pools (rather than the presumed perennial designation) in the Standards and the Integrated Report, and that this would allow TIAER to collect data under pooled, no-flow conditions at 17226. Jill Csekitz added that this change in flow designation is based on an EPA

approved UAA from the 1990s, and that the change of flow designation would not affect any of the assigned uses or criteria in the AU for contact recreation, aquatic life, or other uses.

Discussion of a TCEQ statement of progress in the watershed

Several stakeholders expressed that it would be helpful if TCEQ would make some sort of statement about progress in the watershed. Earl Lott noted that TCEQ is willing to issue some sort of statement along those lines. Louanne Jones mentioned that the annual Bosque status report was in production and would be published in June, with an enhanced section on environmental progress. She also stated that she could develop a document specifically about progress in the watershed.

Jim Bradbury and other stakeholders expressed that it would be helpful if TCEQ would draft and issue a one or two page document about progress in the watershed, something much shorter than the annual status report, aimed more at stakeholders who are not familiar with all the details of the TMDL and the I-Plan measures of success. Charlie Olson recommended that the TCEQ statement include a sentence or two at the end of the document confirming that TCEQ remains committed to assuring that the progress that has been achieved will be maintained over time.

TCEQ agreed to draft and publish such a statement.

Other Work Group Discussion

Dan Opdyke asked whether TCEQ had discussed the recommendation of some work group members, including the City of Waco and the Bosque River Coalition, to do a further study or monitoring to learn more about the nutrient/chlorophyll-a interaction in the Bosque and/or why chlorophyll-a concentrations remain above screening levels throughout the river.

Louanne Jones noted that TCEQ has been discussing the possibility of two different studies that might be undertaken in FY23, depending on funding and other issues, but that no decision has been made about any future study. The possible studies TCEQ has discussed so far are:

- A nutrient study similar to the TIAER study by Kiesling et. al. in 2001, perhaps enhancing that study beyond the scope of the 2001 study. TCEQ has determined that this project would be eligible for federal Section 106 grant funding and for state funding. Cost of this study is currently unknown.
- A biomass study similar to a TIAER study conducted by McFarland and Millican in 2008, which aimed to characterize algal growth in the river and determine whether factors other than nutrient loading were contributing to abundant algal growth in the river. The study collected and analyzed periphyton samples to this end. Cost of this study is also unknown.

Dan Opdyke noted that since phosphorus reduction goals have been achieved at some of the stations, such studies could illuminate what is still driving chlorophyll-a concentrations above the TCEQ screening levels.

Darren Turley expressed that dairy operators in the watershed are very nervous about the prospect of further studies of chlorophyll-a and whether they might lead to further restrictions on the dairies related to chlorophyll-a, when they have already taken such extensive measures to reduce phosphorus. He noted that the dairy industry in this watershed was hit hard by the restrictions imposed through their permits as a result of the TMDLs, with several dairies closing or relocating and loss of membership, and that the dairies remaining have already expended a significant amount of money and effort to reduce phosphorus, and do not want to see additional restrictions.

Jay Bragg noted that statements in the adopted TMDL acknowledge that the phosphorus endpoint goal could/would reduce occurrences of algal blooms, not eliminate them.

Dan Opdyke stated that the impairment identified on the 303(d) list for the river is excessive algal growth, and that phosphorous reductions were aimed at reducing that growth. He noted that chlorophyll-a concentrations are also an indicator of algal growth.

Jill Csekitz said that TCEQ does not desire any scope creep as a result of possible future studies of nutrient dynamics in the river, and must work with the stakeholder group when devising future studies to define the outcomes desired for such studies. Louanne Jones remarked that TCEQ's purpose for such future studies would be to provide other possible ways of showing progress and the effectiveness of phosphorous reductions.

Earl Lott commented that TCEQ understands Darren's concern and shares the same sentiment. He assured stakeholders that TCEQ's goal is not to impose more restrictions. Earl went on to indicate that discussions about whether there would be additional studies, what those studies might be, and what they might cover, would all be decided by the TCEQ at a later point in time.

Paul Cain asked whether the annual Bosque status report would discuss future monitoring or studies. Louanne Jones responded that since it is a backward-looking report, it will not. But that the shorter document TCEQ has committed to developing might include that information.

Discussion about providing the Work Group recommendations to the greater stakeholder group

Earl Lott began a discussion of possible next steps for the Work Group and the Bosque River project. Work Group members discussed how to best share their recommendations with other watershed stakeholders. Ideas discussed included:

- Holding a full meeting of the Bosque River stakeholder group later in the year to report on the efforts of the Work Group and progress in the watershed. Jenna Walker volunteered the assistance of the Bosque River Coalition in coordinating such a meaning, and suggested that if we wait until September, we might be able to meet in person. Louanne Jones noted that September would be one year since the last general stakeholder meeting, which is an appropriate time span.
- **Sending an email to the larger Bosque stakeholder group** rather than a meeting with results and recommendations from the Work Group rather than a meeting.

Summarize Conclusions / Review Action Items

Louanne Jones noted that TCEQ has committed to preparing a short summary of progress in the watershed, and would coordinate a future meeting of the general stakeholder group to discuss implementation progress and the Work Group recommendations, with possible help on meeting coordination from Jenna Walker and the Bosque River Coalition.

Louanne asked the members whether there were any further topics they need to discuss to fulfill the charge given to the Work Group, or whether they thought they had completed their charge. Hearing no opinion that the Work Group needed to discuss further topics, Louanne noted that the Work Group has completed its charge from the general stakeholder group.

Earl Lott thanked the Work Group members for their participation, their good discussions, and their willingness to work toward commonly acceptable recommendations. He acknowledged that the final recommendations were not perfect from the point of view of all stakeholders, but that he thinks the final recommendations are sound and provide a good set of next steps for the watershed.

The meeting adjourned early at approximately 11:15.

Meeting Participants

(Listed in order of time joining the online meeting.)

Fourteen of the 16 voting Work Group members were present, which constitutes a quorum.

Name	Affiliation
Louanne Jones	TCEQ, TMDL Program, Water Quality Planning Division
Jay Bragg	Texas Farm Bureau
Lauren Kalisek	Attorney for City of Waco
John Foster	Texas State Soil and Water Conservation Board
Jim Bradbury	Attorney, Agricultural Law
Darren Turley	Texas Association of Dairymen
Jill Csekitz	TCEQ, Technical Specialist, Water Quality Planning Division
Kerry Niemann	TCEQ, Section Manager, Water Quality Planning Division
Elaine Fagner	McLennan Community College
Jennifer Bronson-Warren	Texas Parks and Wildlife Department
Sarah Whitley	TCEQ, SWQM Program, Water Quality Planning Division
Britt Dean	EPA Region 6
Jaehak Jeong	Blackland Research Center, Texas A&M AgriLife Research
Paul Cain	City of Waco
Dan Opdyke	Anchor QEA
Nicole Hall	TCEQ, TMDL Team Leader, Water Quality Planning Division
Earl Lott	TCEQ, Director, Office of Water
Lori Hamilton	TCEQ, Deputy Director, Water Quality Planning Division
Jim Drake	EPA Region 6
Will Beecherl	Flat Top Ranch
Charlie Olson	Landowner; Haley and Olson, Attorneys
Jenna Walker	Bosque River Coalition
Anne McFarland	Watershed resident, retired TIAER
Randall Rush	EPA Region 6
Michael Martin	TCEQ Region 4