

North Bosque River TMDL Work Group Meeting

Meeting Summary

November 12, 2020, 3:30-5:00 p.m.

Online via Microsoft Teams

- TCEQ Office of Water Director Earl Lott opened the meeting with a welcome and overview of goals for the Work Group. Lori Hamilton, Deputy Director of the Water Quality Planning Division, invited all participants to introduce themselves. A quorum of the membership was present.
- Louanne Jones, TCEQ TMDL Project Manager (PM), queried the group about whether they had read the draft Goals and Guidelines for the Work Group, and whether anyone had questions or objections about any of its content. There being no objections, the Goals and Guidelines for the Work Group were approved.
- **Options for completion or partial completion of the TMDL I-Plan**

After much discussion, essentially two different opinions emerged about the success of TMDL implementation, as summarized below. These are opinions expressed at the meeting and are not recommendations by the Work Group or TCEQ.

- 1) The TMDL I-Plan has been a complete success and the I-Plan should be closed out. TMDL goals have been consistently met at four of the five index monitoring stations. The fifth station, TCEQ 17226, is not a representative station, since the river there is intermittent and there are subsequently many times the river cannot be sampled. Given the nature of the Bosque at that site, the fact that concentrations have remained static at Station 17226 is indicative of success in that part of the watershed, because concentrations of phosphorus have not increased.

After 18 years of TMDL implementation monitoring, and including data collected prior to TMDL development, this is the most studied watershed in Texas, and perhaps one of the most studied in the country. Its success should be recognized and reported so it may be used by others as a case study for successful TMDL implementation.

Jay Bragg, John Foster, Jim Bradbury, and Darren Turley were the primary stakeholders who spoke for this decision.

- 2) It is not yet clear that the I-Plan has been a complete success. Although water quality is consistently meeting targets at four of the five index stations, the target is not being met at the fifth, uppermost station. In addition, chlorophyll a concentrations remain above state screening criteria throughout the watershed. These facts, in addition to changing land uses in the watershed, warrant more investigation before the

TMDL implementation is considered a complete success. More information is needed to assure stakeholders that if the TMDL implementation process is brought to a close, water quality goals will continue to be met.

Jenna Walker, Elaine Fagner, and Paul Cain were the primary stakeholders who spoke for this decision, with support from Anne McFarland, Charlie Olson, and Vance Kemler.

Stakeholders then brought up several questions about what it would mean for the watershed and water quality to declare that the TMDL implementation had been a complete success. TCEQ and EPA staff explained that once developed, TMDLs remain in place indefinitely, unless somehow amended or withdrawn, and that consequently, regulated dischargers in the watershed would continue to be bound by limits set for meeting the designated phosphorus loads. EPA staff mentioned that EPA does not assert authority over TMDL I-Plans. TCEQ staff noted that Texas I-Plans are designed to be adaptive, and may be revised at any time based on the wishes of the stakeholders.

TCEQ would expect that if TMDL implementation was considered complete, phosphorus concentrations would continue to decline or remain steady if no new factors were introduced. TCEQ, in cooperation with the Brazos River Authority and/or TIAER, would continue to monitor water quality in the river at least quarterly if stakeholders decide the I-Plan has been successful and no further implementation measures are needed.

TCEQ staff then discussed some possible options for moving forward, depending on what stakeholders decide about whether implementation has been successful, and received stakeholder feedback on those options. These are just options; none are recommendations at this time.

- Recommending delisting of Segment 1226 and/or Segment 1255 to EPA in the *2022 Texas Integrated Report of Surface Water Quality*. It was noted, though, that EPA approval was not certain, even though EPA approved the use of phosphorus concentrations as the surrogate environmental goal for the TMDL endpoint. Since chlorophyll a concentrations are still of some concern, and the target is not being met at Station 17226, EPA might want additional justification to approve delisting. This is complicated by the fact that the impairment listed for the river is for excessive algal growth, causing it not to meet the state's narrative standards. TCEQ staff noted there are no associated numeric criteria for evaluating acceptable algal growth or for evaluating whether the narrative standard is met. The North Bosque River is the only water body in the state listed for not attaining the narrative standard. EPA staff noted that they could not express an opinion at this meeting about possible delisting requirements and decisions.
- Separating future plans for Segment 1255, where the TMDL target is met in one of two index stations, from those for Segment 1226, where the target is being met at all stations currently being monitored. The

stakeholders in that case would likely create a revised I-Plan summarizing success in the watershed to date, and outlining separate future actions for each of the segment subwatersheds. This plan revision could take many forms and include monitoring plans for each of the two subwatersheds.

Jay Bragg noted at this point that we should separate the issue of delisting from that of deciding whether or not TMDL implementation has been successful. He noted that he considered details about the delisting process and the justifications for delisting to be outside the scope of the Work Group's charge.

Paul Cain asked how we benefit by calling the TMDL implementation process complete. Other stakeholders responded that this it would allow the state to shift its focus and funding to other watersheds where there might be a greater need. Also, that it was important to recognize the successful efforts by the stakeholders and explain how and why their efforts improved water quality.

Elaine Fagner asked what it would mean for water quality in Lake Waco if the process were considered complete. Other stakeholders noted that continued concerns for chlorophyll a and changing land use would not result in a convincing case for complete success to be made to the residents of the City of Waco.

Stakeholders then briefly discussed the need for significant public outreach and education around declaring the implementation a success, and suggested that outreach be done with numerous citizen and industry groups in the watershed.

- **Ongoing Monitoring Requirements**

The discussion then turned to what monitoring would be done if the I-Plan were deemed successful, and what options might be for continued or additional monitoring if not deemed completed.

Elaine Fagner asked about the current budget and monitoring for the North River under the current I-Plan. The TCEQ TMDL PM responded that the annual budget for monitoring in the watershed was currently \$170,000, which is paid for using state TMDL funding. Budgets and funding sources have varied over time. The current budget covers routine monitoring every two weeks, with a few parameters measured monthly, but most measured biweekly. In addition, stormwater samples are collected at up to four major storm events in the watershed. The amount of stormwater sampling is dependent on annual rainfall in the watershed. Stakeholders asked for a breakdown of how the money was spent by segment subwatershed and by routine vs. stormwater monitoring. The TCEQ TMDL PM responded that an exact breakdown was probably not possible, but TCEQ would work with TIAER to come up with estimated amounts.

The TCEQ TMDL PM asked stakeholder Anne McFarland, formerly the Bosque program manager with TIAER, whether a biomass study had ever been conducted on the river, which might serve as a baseline for a new study. McFarland replied that it had, and TCEQ committed to getting the study from

the current monitoring project manager at TIAER. McFarland also noted that additional GIS data acquisition and analysis of changing land uses would be useful in determining the possible causes of continued nonattainment at Station 17226.

Britt Dean of EPA suggested that TCEQ should bring in SWQM staff to discuss water quality. TCEQ staff noted that Sarah Whitley, the TCEQ SWQM basin assessor for the Brazos River Basin, was in attendance. Ms. Whitley then summarized factors related to water quality such as the continued issue with chlorophyll a concentrations above the screening levels, and that high concentrations of chlorophyll a are associate with algal growth.

Ms. Whitley stated that there was precedent for scaling back monitoring in water bodies that were restored to attaining standards. Monitoring is often scaled back to quarterly routine monitoring in that situation.

Possible strategies for continued monitoring were discussed, including scaling back routine monitoring throughout the watershed to monthly or quarterly to free up resources for additional monitoring above Station 17226.

Opinions expressed by stakeholders on next steps in monitoring were narrowed down to three primary options. These are stakeholder opinions only, and not recommendations. The group was divided on which was the best option.

- Monitoring should be scaled back to quarterly, and no new monitoring should be undertaken, because the segments are no longer impaired.
- Monitoring should be scaled back in Segment 1226 to either monthly or quarterly to ensure positive trends continue. New monitoring above Station 17226 and GIS data acquisition should be considered for a revised I-Plan.
- Monitoring should be scaled back to bimonthly at all five index sites.

- **Wrap-up and action items**

Vance Kemler noted that based on his reading of TIAER's 2019 Trends Report, significant positive progress has been made but that there may be a need for additional data. Darren Turley noted that people don't think about the tremendous progress and changes that have been make in the agricultural sector. He also noted that more land is now under control of the regulated CAFOs in the watershed, which should have continued positive benefits for water quality.

Questions identified for further discussion and resolution:

- If we declare the TMDL implementation complete, what are the benefits?
- What recommendations does the group have for continuing monitoring in the watershed? Includes questions related to the frequency of monitoring and the need for new monitoring.

- What assurance do we have that the problem will not recur without continued monitoring?
- What steps should be taken to educate elected officials and stakeholders in the Bosque River watershed and in the City of Waco to address likely concerns related to closing out the implementation process? What would be the means and timing for this outreach?

Action Items:

- The TCEQ TMDL PM will gather and provide budget information related to the current monitoring plan.
- The TCEQ TMDL PM will summarize and provide currently available analyses supporting attainment of the TMDL water quality goal and questioning attainment of the goal.
- The TCEQ TMDL PM will prepare a draft meeting summary for review by the Work Group. After making any revisions necessary, TCEQ will post the summary on the Work Group's webpage.
- The TCEQ TMDL PM will create and send a Doodle poll suggesting possible meeting dates for the weeks of December 14, January 4, and January 11.
- The TCEQ TMDL PM will provide the specific language in the I Plan regarding the point at which the performance metrics are reached.
- The TCEQ TMDL PM will look into the possibility of gathering total and/or annual costs for the TMDL and I-Plan.

Meeting Participants:

Work Group Members

Darren Turley, Texas Association of Dairywomen

Jay Bragg, Texas Farm Bureau

Jim Bradbury, Agricultural Law Attorney

John Foster, Texas State Soil and Water Conservation Board (TSSWCB)

Thomas 'TJ' Helton, TSSWCB

Jennifer Bronson-Warren, Texas Parks and Wildlife Department

Charlie Olson, Land Owner

Paul Cain, City of Waco

Lauren Kalisek, Lloyd, Gosselink, Rochelle, & Townsend

Will Beecherl, Flat Top Ranch

Jaehak Jeong, Blackland Research Center

Jenna Walker, Bosque River Coalition

Michael Martin, TCEQ Region 4

Anne McFarland, Resident, retired from TIAER

Elaine Fagner, McLennan Community College

Vance Kemler, Biogas Development

TCEQ and EPA Staff and Guests

Earl Lott, TCEQ

Lori Hamilton, TCEQ

Kerry Niemann, TCEQ

Louanne Jones, TCEQ

Sarah Whitley, TCEQ
Richard Wooster, EPA
Maria Martinez, EPA
Britt Dean, EPA
William Cooper, EPA
Dan Opdyke, ANCHOR QEA
Daniele Baker, ANCHOR QEA