2026 Integrated Report (IR) – TCEQ Surface Water Quality Assessment Advisory Workgroup (SWQAAWG) Verbal Comments

November 7, 2024

Topic	Comment	TCEQ Response
Water Quality Standards	Do you have a timeline for the Nutrient Criteria Water Quality Standards (WQS) study? We are currently working on a similar project at BRA and would like to know the results of this study before we start. We don't want to waste resources.	The timeline for this project is still under discussion.
Water Quality Standards	In the Brazos basin we have a variety of waterbodies and some of them are very turbid. Will the method consider the diversity of environmental conditions and levels of turbidity observed throughout the state?	No. This study intends to concentrate on the twenty-two identified nutrient sensitive streams located throughout the Texas Hill Country. These streams are defined by their clear water and the method is intended to be specific to these twenty-two streams.
Water Quality Standards	We are concerned that once you perform this study, EPA will want to apply this specific method across the state. We do not want that to happen if you haven't also studied how the method is affected by turbidity.	We will be mindful of this detail and make sure that EPA is aware that this method only applies to the twenty-two nutrient sensitive streams identified in the study.
SWQM pH Study	Can you please summarize the presented information in a way that is more digestible for the public?	We are working on finding the best assessment method for Lake Sommerville because this lake has been historically impaired due to high levels of pH. We are currently gathering monthly data on Lake Somerville over a two-year period. We plan to analyze this temporally distributed data set and evaluate pH using four different approaches. We would like for you all to weigh in on the four different analysis methods and provide feedback on your preferred approach/method.

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SWQM pH Study	When looking at the four options presented, the Binomial 10%-10% method appears to be the best option. Could you develop a hybrid method using the Binomial 10%-10% and Rapid Changes methods? It is also important to capture the rapid changes in pH especially since pH is on a logarithmic scale.	Yes, we can certainly investigate a hybrid method. Based upon the data we have collected so far; we are also leaning towards using the Binomial 10%-10% method to assess pH.
SWQM pH Study	Has TCEQ considered taking a new look at the current pH criteria of 6.5 and 9.0? It is important to consider exposure and duration of exposure in a study such as this, because what we really want to know is if the biology of a lake is being impacted. We need to study how long-term exposure to elevated pH affects aquatic species. Have you considered doing a biological assessment of the lake in conjunction with this 24-hr pH assessment?	We have not considered performing a biological assessment of the lake as part of this study because we do not currently have methods to assess biological integrity in lakes. However, we are currently contracting with the Center for Reservoir and Aquatic Systems Research (CRASR) at Baylor University to develop Indices of Biotic Integrity (IBIs) for reservoirs in Texas. The current pH criteria are set by the Texas Surface Water Quality Standards (TSWQS). To change those criteria, there would need to be a Standards revision. Water quality standards revisions are a separate process from this effort.
SWQM pH Study	Do you plan to submit this data to SWQMIS, and if so, do you plan to attach the raw data files as BLOB files in SWQMIS? Can we also see the raw data you are using for this study and see the excel files with the methods you have used to analyze the data?	The data will be entered into SWQMIS once the necessary changes to our assessment guidance and database are completed. They will be available in the 2026 IR. Yes, we can distribute the excel files containing the raw data and analysis methods we are using for this study.
SWQM pH Study	The best assessment method for this project will be the one that captures the water quality standards and best represents the waterbody. pH is on a log scale. That means small changes in the Rapid Changes method are actually large changes.	TCEQ acknowledges this comment.

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SWQM pH Study	Can you please provide some context for why these three assessment units on Lake Somerville were chosen?	Lake Somerville has been historically impaired for high pH. That is why this waterbody was chosen for this study. The three assessment units were chosen because they represent the upper lake, mid lake and lower lake (dam site) for this waterbody.
SWQM pH Study	How did the 24-hr dissolved oxygen track when compared to the 24-hr pH data? Did you see any correlations?	24-hr dissolved oxygen usually trended high whenever pH was trending high. However, we cannot draw any conclusion since that was not the focus of this study. Correlations, side by side or graphical comparison of pH and dissolved oxygen were not performed.
SWQM Chlorophyll-a	Based on the low number of events in this study, can you confidently tell statistical differences?	Yes, there is a low number of events. The study included some variability, however, most of it was not significant. The issue with this particular study and trying to increase the number of events was that it was difficult to handle and ship such large amounts of water required for this study.
SWQM Chlorophyll-a	The variability was relatively small. Can this impact the assessment for the Integrated Report?	All data has variability. When performing the assessment for the Integrated Report we are looking at a seven- to ten-year period of record for the data. This low level of variability is unlikely to skew the assessment results.
SWQM Chlorophyll-a	It looks like the results of this study support TCEQ's continued use of the "line of evidence" approach used with chlorophyll-a.	TCEQ acknowledges this comment.
General Discussion	Saltwater desalination causes stratification of layers and can cause dead zones at the bottom of a waterbody. Has this workgroup considered the effects of desalination in the assessment?	There are currently no water quality standards for salinity in tidally influenced waters in Texas. This would be addressed through a more detailed evaluation of site-specific salinity criteria in coastal waters.

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General Discussion	Considering the recent desalination permits being issued by Texas, we think there should be salinity criteria included in the Texas Surface Water Quality Standards. How do we protect our bays and estuaries from increased salinity?	There are currently no water quality standards for salinity in tidally influenced waters in Texas. The TSWQS undergoes triennial revision and there is a workgroup specifically for the water quality standards convening soon.
General Discussion	There used to be a day-long meeting where water quality standards and assessment methods were discussed. Can we bring that back? Or, can we have the water quality standards workgroup you just mentioned and this workgroup on the same day? These workgroups seem to overlap in content.	TCEQ is not aware of this type of meeting occurring before, but we can certainly investigate it. The only issue would be that the water quality standards revision happens on a triennial basis and the assessment for the Integrated Report happens on the biannual basis. The schedules for these workgroups would not naturally overlap. We would need investigate this further.
General Discussion	Is TCEQ looking into the matter of permits being issued to treat briny groundwater before it is released into surface waters? That could cause issues with salinity.	The SWQAAWG is not the appropriate venue for this discussion. This would be better suited for the water quality standards workgroup.
General Discussion	Can TCEQ please share the list of twenty-two streams that is being used in the water quality standards nutrient study?	Yes, we can share that list.
General Discussion	What responsibilities for surface water quality are covered by the TCEQ and which are covered by the Railroad Commission (RRC)?	There is a Memorandum of Understanding (MOU) between TCEQ and RRC which delineates our separate responsibilities. The MOU can be found in Title 16 of the Texas Administrative Code (TAC) in Chapter 3 under Rule §3.30.

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General Discussion	Is there any update on the 5n studies?	Either Planning & Implementation or Standards Implementation worked on these studies. We can provide contact information for these studies following the meeting.
General Discussion	Are there any updates on the Tidal IBI project?	We are still in the final phase of this project. The final report will be completed in 2025. We will look through the project results and provide recommendations once the final report has been completed.