

Response to Public Comment
One Total Maximum Daily Load for Bacteria in Gilleland Creek
 April 13, 2007

Tracking Number	Date Received	Affiliation of Commentor	Summary of Request or Comment	Summary of TCEQ Action or Explanation
001	02/22/07 Oral Comment	Pflugerville resident	Commenter was supportive of the efforts of the TCEQ, LCRA, and the city of Pflugerville to address the impairment. Commenter expressed her desire to become involved in implementation.	TCEQ appreciates the support of the commenter. No changes have been made to the TMDL based on this comment.
002	02/22/07 Oral Comment	Pflugerville resident	<p>Comment 1) Commenter was supportive of the effort and applauds the agencies involved.</p> <p>Comment 2) He would like to have more clarification on the technical formulas in the report, and questioned whether the bacteria standards adequately protect human health.</p> <p>Comment 3) He would like to see the creek restored.</p>	<p>Response 1) TCEQ appreciates the support of the commenter. No changes have been made to the TMDL based on this comment.</p> <p>Response 2) Supplemental information regarding the conversion factors used to develop the TMDL has been added. The State adopted bacteria standard is based upon EPA guidance, and is protective of human health and full body contact recreation.</p> <p>Response 3) The TMDL development process involves the preparation of two documents (1) a TMDL which determines the maximum allowable loading and allocates the load to point and nonpoint source categories, and (2) an implementation plan which is a detailed description and schedule of regulatory and voluntary management measures necessary to achieve the pollutant reductions identified in the TMDL. Preparation of implementation plans is critical to ensure water quality standards are restored and maintained. This last comment deals with aspects of implementation and will be addressed more fully in the implementation plan for Gilleland Creek. Preparation of the implementation plan for Gilleland Creek will be initiated immediately upon Commission approval of the TMDL, and will involve interested persons with a stake in its outcome. Additional clarification on how implementation would proceed has been</p>

				added to the TMDL document to the section titled, "Implementation and Reasonable Assurances" under the heading of "Implementation Processes to Address the TMDL."
003	02/23/07 letter	Pflugerville resident	<p>Comment 1) Creek is not suitable for playing in or eating the fish.</p> <p>Comment 2) TCEQ does not have adequate funding to do its job, and is swayed by political interests.</p> <p>Comment 3) Encouraged TCEQ to educate city and county governments regarding BMPs and improve enforcement policy guidelines. Applauds the City of Pflugerville for looking into a regional wastewater collection system.</p> <p>Comment 4) Commends the TMDL project team and encouraged TCEQ to quickly move forward with implementation.</p>	<p>Response 1) The existing impairment is for non support of the contact recreation criterion due to elevated levels of E. coli. Though elevated levels of E. coli can pose a higher risk of infection to individuals involved in contact recreation activities, there is no ban on fish consumption. No changes have been made to the TMDL based on this comment.</p> <p>Response 2) TCEQ secured adequate funding to address this TMDL, and places substantial resources into the development and implementation of TMDLs. No changes have been made to the TMDL based on this comment.</p> <p>Response 3) The City of Pflugerville does have existing rules requiring BMPs and is subject to TCEQ Chapter 213 for portions of its jurisdiction regarding protection of the Edwards Aquifer. No changes have been made to the TMDL based on this comment.</p> <p>Response 4) TCEQ appreciates the compliment of our efforts. The TMDL development process involves the preparation of two documents (1) a TMDL which determines the maximum allowable loading and allocates the load to point and nonpoint source categories, and (2) an implementation plan which is a detailed description and schedule of regulatory and voluntary management measures necessary to achieve the pollutant reductions identified in the TMDL. Preparation of implementation plans is critical to ensure water quality standards are restored and maintained. This last comment deals with aspects of implementation and will be addressed more fully in the</p>

				implementation plan for Gilleland Creek. Preparation of the implementation plan for Gilleland Creek will be initiated immediately upon Commission approval of the TMDL, and will involve interested persons with a stake in its outcome. Additional clarification on how implementation would proceed has been added to the TMDL document to the section titled, "Implementation and Reasonable Assurances" under the heading of "Implementation Processes to Address the TMDL."
004	03/05/07	Texas Parks & Wildlife Department	<p>Comment 1) Preparing the load duration curve using the single sample standard may not be protective of the geometric mean criterion. "We recommend that the load duration curve be recalculated using the geometric mean criterion for E. coli, 126 cfu/100ml, or that the TMDL demonstrate some other means of compliance with the geometric mean criterion."</p> <p>Comment 2) "The waste load allocation for municipal point sources seems unduly large." "We recommend reducing the allocation for municipal wastewater treatment plants to realistic values that reflect compliance with permit limitations, water quality standards and the TMDL."</p>	<p>Response 1) In order to be protective of the geometric mean criterion, the TMDL has been modified. A reduction in loading of 93% in the 0-10 percentile flow is still necessary, but instead of a 64% reduction in the 11-30 percentile flow, a reduction of 82% in the 11-50 percentile flow is necessary to bring Gilleland Creek into compliance with both the geometric mean and the single sample criterion.</p> <p>Response 2) The WLA for WWTFs originally was developed using the single sample criterion concentration of 394 cfu/100mL minus a 10% margin of safety. The WLA has been recalculated using the geometric mean of 126 cfu/mL and a 5% margin of safety (see Table 5).</p>
005	03/12/07	Texas Department of Agriculture	<p>Comment 1) "The 303(d) listing for Gilleland Creek bacteria is a result of data that TCEQ analyzed from the assessment period of March 1, 1998, through February 28, 2003. ... We suggest the data used for the TMDL report is outdated and not representative of current watershed conditions, which is an effluent dominated stream in a rapidly urbanizing watershed. Using data that is 3-9 years old does not reflect current watershed conditions and will not provide a useful tool to base future loading reductions and is not in the best interest of the watershed stakeholders. We recommend that due to the rapid urban expansion and infrastructure growth since 2003, current land use maps and water samples should be used to re-develop the TMDL to make it more representative of current land use and effluent</p>	<p>Response 1) TCEQ recognizes the facts regarding the data used to identify the impairment was from the 303(d) list of 2004. For that reason, TCEQ began work on the project in September 2004. TCEQ realized that more current and targeted data should be collected, so an intense data collection program was initiated in June 2005 and completed in March 2006. This is the data on which the TMDL is based. An explanation of the data collection effort has been added to the TMDL document. Also, TCEQ used the latest land use data available, which was from 2003. Notation has been added to the TMDL document to indicate this. TCEQ spent the time from the end of data collection until February 2007, analyzing the</p>

		<p>contributions to the creek. We also recommend that the TCEQ follow the TCEQ/TSSWCB Bacteria Task Force TMDL development recommendations for bacteria impaired streams.”</p> <p>Comment 2) TDA felt that stakeholder involvement in this TMDL project was minimal with a total of only 3 meetings for input. TDA was confused over a mistake on the footer of the draft TMDL document, leading them to believe there were possibly two draft documents. TDA suggested that TCEQ follow the Bacteria Task Force Recommendations on stakeholder involvement.</p> <p>Comment 3) TDA recommends that the statement in the TMDL executive summary that states, “The most probable sources of the impairment are nonpoint source in origin”, should be deleted or amended to include point source contributions.</p> <p>Comment 4) TDA recommends modifying or amending the statement in the draft TMDL document that states, “that since it is likely that the bacteria criteria are exceeded due to nonpoint sources...The TCEQ does not see a need to modify point source requirements for disinfection at this time. The load reduction will likely come from nonpoint sources.” TDA would like to see point sources identified as contributing to the bacteria loading.</p> <p>Comment 5) TDA recommends removing Table 3 Travis County Livestock Census Data on page 10, stating that it is “misleading and does not present an accurate picture of the livestock numbers in the Gilleland Creek watershed.”</p> <p>Comment 6) TDA states that the percent reductions in loading to bring Gilleland Creek into compliance with the bacteria criterion are not accurate due to “the length of time between the assessment sampling and the current rapid urban expansion in the watershed.” TDA recommends that the reductions should be recalculated using current land use and sampling data and to include point source</p>	<p>new data set, and drafting the report as expeditiously as possible. The TMDL development steps were consistent with the recommendations of the TCEQ/TSSWCB Bacteria Task Force.</p> <p>Response 2) The correct number of stakeholder meetings was four plus the public meeting to receive comment. This is more opportunity than the federal requirement of one public meeting during the comment period. TCEQ conducts meetings throughout the TMDL process, in order to provide project information, as well as to receive public feedback on the process. TCEQ acknowledges the TMDL document footer mistake, and the document has been modified to correct this.</p> <p>Response 3 and 4) The analysis of the LDC presented in the TMDL document follows the guidance given in the EPA document titled “An Approach for Using Load Duration Curves in the Development of TMDLs.” This analysis points to source contributions during runoff events (stream percentile flows greater than 50% as described in Figure 4). The available information on the WWTFs discharging to Gilleland Creek indicates compliance with effluent limitations with disinfection. TCEQ agrees that point sources contribute to the bacteria load as described in Table 5. However, our analysis does not indicate that their contribution is causing the stream to be in noncompliance. TCEQ asks TDA to provide any additional data that might support this comment. No changes have been made to the TMDL based on these comments.</p> <p>Response 5) Table 10 data is from the United States Department of Agriculture county livestock census data, and is the only census data available for the Gilleland Creek watershed. The draft TMDL document text states, “Table 3 shows livestock</p>
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			<p>contributions.</p> <p>Comment 7) “The listing of Gilleland Creek for bacteria appears to be highly affected by the choice of assessment methodology and criterion used in evaluation of the bacteria data. The apparent inconsistencies represented by the water quality stream criteria when compared to bacteria loading seems to provide conflicting assessments of the water quality in Gilleland Creek. TCEQ TMDLs are based on loadings and to determine loadings the single sample criterion must be used. However, TCEQ’s assessment methodology can list a waterbody as not meeting intended uses if the bacteria geometric concentration is exceeded...This approach is confusing, and should be clarified because of the difference in bacteria concentrations and loadings and possible misidentification of sources.”</p> <p>Comment 8) TDA states that an explanation should be included that demonstrates that the geometric mean criterion will be attained.</p> <p>Comment 9) TDA recommends a reduction of the WLA for WWTFs.</p>	<p>census data for Travis County. The Gilleland Creek watershed comprises seven and a half percent of the area of Travis county.” TCEQ has not been provided with livestock census data that is specific to the Gilleland Creek watershed and would readily incorporate more accurate data if it became available. No changes have been made to the TMDL based on this comment.</p> <p>Response 6) The TCEQ took a minimal amount of time between data collection and developing the draft TMDL document. Also, the LDC analysis is not dependent upon land use. No changes have been made to the TMDL based on these comments.</p> <p>Response 7) A summary of the bacteria criterion, and how the assessment methodology is applied as it relates to Gilleland Creek, is included in the draft TMDL in the Problem Definition section. No changes have been made to the TMDL based on this comment.</p> <p>Response 8) In order to be protective of the geometric mean criterion, the TMDL has been modified. A reduction in loading of 93% in the 0-10 percentile flow is still necessary, but instead of a 64% reduction in the 11-30 percentile flow, a reduction of 82% in the 11-50 percentile flow is necessary to bring Gilleland Creek into compliance with both the geometric mean and the single sample criterion.</p> <p>Response 9) The WLA for WWTFs originally was developed using the single sample criterion concentration of 394 cfu/100 mL minus a 10% margin of safety. The WLA has been recalculated using the geometric mean of 126 cfu/mL and a 5% margin of safety (see Table 5).</p>
006	03/12/07	Lower Colorado	<p>Comments 1 and 2) LCRA stated that the sampling design was not suitable for LDC analysis. LCRA also stated that</p>	<p>Response 1 and 2) The sampling design for this project was sufficient for development of the LDC</p>

		<p>River Authority</p>	<p>multiple stations should be used and that two years of hourly flow data is sufficient for establishing a flow curve.</p> <p>Comment 3) LCRA suggests that TCEQ provide more advertisement for public meetings.</p>	<p>and was consistent with EPA guidance for the number of samples and sampling location. No changes have been made to the TMDL based on these comments.</p> <p>Response 3) TCEQ agrees that there are always ways to modify and improve existing methods to solicit public comment. TCEQ used the required methods for public notice by publishing the notice in the Texas Register. Notice was also published in a group of newspapers called the Austin Community Newspapers, and consists of: the Westlake Picayune, Lake Travis View, North Lake Travis Log, and The Pflugerville Pflag. In an effort to reach more of the public, TCEQ published the notice in the Austin-American Statesman newspaper, posted notice on the TCEQ internet website, and sent the notice to the TMDL listserve group. Local government officials, such as State Representatives, and State and Federal agencies were sent a notice of the public comment period and public meeting through the U.S. Postal Service. Also, members of the stakeholder advisory group received notification by mail. No changes have been made to the TMDL based on this comment.</p>
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