Response to Public Comment
One Total Maximum Daily Load for Bacteria in the Leon River Below Proctor Lake

Summary of Request or Comment	Summary of TCEQ Action or Explanation
The Texas Commission on Environmental Quality approved the release of the draft TMDL document for public comment on March 19, 2008, and the document was made available on the agency web page for a comment period which ended on May 5, 2008. A public meeting was conducted by TCEQ staff in Hamilton, Texas on April 17, 2008. Sixty four stakeholders registered for the meeting and sixteen presented comments. In addition to a petition signed by one hundred forty stakeholders, ten comment letters were received from stakeholders during the comment period.	
The petition signed by 140 stakeholders requested that the draft TMDL not be approved. The request to delay or deny approval of the TMDL was also reflected in all of the comments at the public meeting (including those from Hamilton County Commissioner Clary and State Representative Sid Miller) and in four of the comment letters from stakeholders (including letters from the Texas and Southwestern Cattle Raisers Association and the Texas Farm Bureau). Two comment letters (including one from the Texas Parks and Wildlife Department) recommended approval of the TMDL.	The decision to move forward with the TMDL is an important policy decision of the TCEQ. The TCEQ agrees that a strong reason to delay the TMDL is the potential revision of the *E. coli* criteria and potential establishment of additional recreational use categories. If standards revision is supported by stakeholders at a statewide level, if adopted by the Commission, and if approved by EPA, Segment 1221 could be de-listed or the magnitude of load reductions could lessen. There are also strong reasons to approve the TMDL at this time. The TCEQ realizes that estimating a future water quality standard may be premature. Segment 1221 of the Leon River has been identified as impaired for contact recreation since 1996. And since 1996, further assessment of *E. coli* conditions throughout the Leon River watershed identified additional stream miles as impaired on the commission's 2008 draft 303(d) list. Some of the newly listed assessment units have even higher concentrations of *E. coli*, compared to the original area of focus. The TCEQ is confident that implementation efforts, particularly the watershed protection plan project that has begun, will achieve load reductions that could restore water quality to achieve the existing water quality standard in the short term. Additionally, the TCEQ is fully supportive of an adaptive management approach towards implementation. Under such an approach, when new or more accurate data and information are available,

	the implementation plan can be adjusted accordingly and TMDL allocations revised as well.
Comments received at the public meeting also recommended that water quality standards for the segment of the Leon River addressed by this TMDL should be revised. This recommendation was also included in six comment letters (including letters from the Texas and Southwestern Cattle Raisers Association, the Texas Farm Bureau, United States Department of Agriculture, and the City of Gustine).	Proposals for revisions to water quality standards to address contact recreation uses are currently being considered. TCEQ has held several stakeholder meetings specifically focused on the review and revision of recreational use criteria for surface waters in Texas. Members of the Leon River TMDL stakeholder group are actively participating in this public process
The petition and several others noted that there is no evidence of human illness due to recreation in the river. Physical restrictions and low flow preclude contact recreational activities and the use classification should be changed.	Effective water quality management attempts to prevent human health impacts, such as water borne illnesses before they occur. The absence of illness due to contact with water in the Leon River below Proctor Lake, does not exclude the State of Texas from its responsibility to comply with the federal Clean Water Act. Section 303(d) of the Federal Clean Water Act requires all states to identify water bodies that do not meet, or are not expected to meet, applicable water quality standards. The compilation of impaired water bodies is known as the 303(d) list. For each water body that does not meet water quality standards, states must develop a TMDL for each pollutant that contributes to impairment. The Texas Commission on Environmental Quality (TCEQ) is responsible for ensuring that TMDLs are developed for impaired surface waters in Texas.
Other issues raised in the petition included: 1. Cost of implementation is unfairly focused because no reduction from a significant source (wild animals) is recommended.	1. The implementation plan will be developed with stakeholders affected by or interested in the goals of the TMDL. In determining which sources need to accomplish what reductions, the implementation plan should consider factors such as: • cost and/or feasibility, • current availability or likelihood of funding, • existing or planned pollutant reduction initiatives such as watershed-based protection plans, • whether a source is subject to an existing regulation, • the willingness and commitment of a regulated or unregulated source.

2. Outdated information was used for model development/application and fecal coliform bacteria not consistent with EPA guidelines.	2. The data collection effort for the TMDL included extensive in-stream monitoring from 1996 to 2004, as described in Table 2 of the report. The TCEQ then followed up with bacterial source tracking sampling and analysis in 2003. The latest water quality assessment and 303(d) list published by TCEQ in 2008 indicates that the impairment still exists. The 2008 list shows the extent of impaired water quality in the Leon River watershed has expanded to include several water bodies that flow into this segment of the river. Agency policies concerning the use of *E. coli* as an indicator organism are addressed later on the bottom of page four (4) of this table.
One stakeholder requested a delay in approval of the TMDL to allow additional study to evaluate all control possibilities.	Approval of the TMDL does not prevent additional evaluation of control possibilities. Stakeholders are needed to assist the TCEQ in to developing the management strategies needed to restore water quality. The TCEQ will continue to work with the Texas State Soil and Water Conservation Board, the Brazos River Authority, and stakeholders to develop a watershed protection plan which will serve to provide: • a forum for stakeholders to meet and reach consensus on the measures necessary to reduce bacterial loads in the basin. • investigation of best management practices and treatment alternatives for bacterial sources in the watershed. • additional water quality monitoring to determine the magnitude and location of sources of bacteria. • enhancements to the water quality model to improve model resolution and to reflect data gathered during the watershed protection plan process.
One stakeholder expressed strong opposition to the approval of the TMDL and raised the additional following issues: 1. When and why the river was designated for contact recreation use, who makes the designation, and steps for changing the use,	1. Designations for contact and non-contact recreation use have been part of the Texas Surface Water Quality Standards since they were first adopted in 1973. The TCEQ is responsible under state law for setting these standards. This section of the river was designated in 1976, consistent with the goal of restoration and protection of fishable/swimmable uses for all waters of the United States in accordance with the Federal Clean Water Act. The criteria for contact recreation use

	are 200 cfu/100 ml of fecal coliform and 126 cfu/100 ml of *E. coli*. Under federal regulations and statutes, states are responsible for the development of water quality standards which are subject to approval by the Environmental Protection Agency. Criteria for non-contact recreational use are 2000 cfu/100 ml of fecal coliform and 605 cfu/100 ml of *E. coli*. Surface water quality standards, including use designations and criteria to support those uses, are adopted as rules of the TCEQ and are subject to approval by EPA. There are two processes by which to make changes to the contact recreation use on a water body. One process is to revise the statewide criteria and uses set in the Texas Surface Water Quality Standards. Existing criteria include an *E. coli* geometric mean and a single sample maximum that should not be exceeded. These criteria support recreational uses which currently include contact and non-contact recreation. Revising the uses and criteria is conducted at least every three years and requires public involvement. Any stakeholders interested in this process are invited to become involved. Revising the water quality standards is a long and lengthy process, will include a stakeholder committee or work group, and ultimately require TCEQ and EPA approval. The second process is to consider preparing a use attainability analysis (UAA) for a specific area. TCEQ would have to demonstrate that contact recreation is not an existing use for a specific water body and would also have to meet at least one of the six allowable factors to lower a designated use. These six factors include: 1. Naturally occurring pollutant concentrations prevent the attainment of the use; or 2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or 3. Human caused conditions or sources of pollution prevent the

	attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or 4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or 5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or 6. Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact. The Water Quality Standards Program of the TCEQ is currently in the process of developing methods for writing a recreational UAA that can be used to produce this justification. Changes to the standards would have to meet all requirements for a rule change including a public meeting, adoption by the TCEQ, and approval by EPA. The EPA must approve a state's water quality standard before it can be implemented in federal Clean Water Act programs like an assessment of the segment's water quality.
2. Use and selection of the contractor and qualifications for employees who make the selection,	2. Selection of the contractor followed state procedures for competitive, objective solicitation for professional services contracts. An Invitation For Bids was issued by the TCEQ in 2001 and made available to the public consistent with State Procurement Services procedures. Bids were reviewed and ranked by a committee of professional TCEQ staff.
3. Why procedures "abandoned by EPA" used to develop the TMDL document, and	3. We assume that the "abandoned procedures" referenced in the comments refer to the EPA Guidance Document published in 1986 concerning the use of *E. coli* as an indicator organism. Based on the 1986 guidance, EPA directed States to adopt the new *Enterococci/E. coli* criteria during their next triennial review. However, there were still many

	questions posed by States on how to implement the recommended standards. In order to address these questions, EPA determined that implementation guidance was needed for the recommended bacteria criteria. This supplemental guidance has not been published. Nonetheless, in the water quality standards revisions adopted in 2000, TCEQ implemented the recommendations from the 1986 EPA Guidance related to the use of *Enterococci/E. coli* for indicators. Both the fecal coliform and *E. coli* criteria are valid indicators in Texas. Texas data collection has been transitioning to the newer *E. coli* methods. Also, many data inputs to the Leon River model relied upon fecal coliform values derived from valid research.
4. Questioned the use of terms and phrases which suggested uncertainty, and or generalizations.	4. While the TCEQ strives to base decisions on facts and documented information, there are issues that the agency deals with that include considerable variability and uncertainty. Issues related to recreational uses and bacteria contamination are fraught with variability and uncertainty. Any water quality modeling analysis involves the use of numerous assumptions. The challenge is to use all of the available data and apply best professional judgment to assumptions where data is not available. The TCEQ has sought and received stakeholder input on many of these uncertainties.
One stakeholder expressed support for the TMDL document related to the process to develop implementation plans and actions with full input and support from local stakeholders, the process of a phased approach and adaptive management, use of all historical data, and implementation of base level BMPs throughout the watershed. The following concerns were also raised:	
1. Suggestion to add water quality station 11818 (Indian Creek @ CR 304), CAFOs, and WWTFs to Figure 3,	1. As suggested, water quality station 11818 (Indian Creek @ CR 304), CAFOs, and WWTFs were added to Figure 3 of the TMDL report.
2. Limited evaluation of the contribution from CAFOs,	2. Manure production from CAFOs was quantified as land based Waste Application Field (WAF) washoff loadings, and therefore is presented as a category of load allocation in the impaired reaches. The TCEQ has the authority to consider further regulation and control of CAFO lagoon overflows. Though there were no data available with which to include retention control structure overflows in the model, CAFOs are currently

	required to report overflow volumes, but not *E. coli* data. The evaluation of the contribution of CAFOs in the watershed can be addressed further through re-calibration of the model or adaptive implementation. A time series could be developed for each CAFO in the impaired reach to represent potential lagoon overflows under wet weather conditions. The same concept of overflow loading from municipal point sources was developed after reviews of TCEQ compliance reports for municipal wastewater systems. This formulation could accomplish the objective of incorporating a mechanism for simulation of high-flow release from CAFO lagoon overflows.
3. Lack of identification of loads by watershed,	3. Figure 8, Fecal Coliform Production Rates for Livestock and Wildlife, enabled calculation of loading parameters for direct input into the modeling analysis, specifically, fecal coliform accumulation rates (in count/acre/day) and the maximum accumulation (in count/acre). The inventory of animals and their waste loadings were analyzed using a modification of the EPA's Fecal Tool spreadsheet (EPA, 2000). Load calculations for each subwatershed, as well as the procedure for conversion of fecal coliform to *E. coli* data, were determined for the modeling analysis and are described in more detail in section 6.3 Load Allocations and section 6.7 TMDL Summary respectively, of the "Final Modeling Report for Fecal Coliform TMDL Development for Leon River below Proctor Lake, Segment 1221," posted and available on the TCEQ web-page. The impaired reach includes assessment units (AUs) 1221_05, 1221_06, and 1221_07 and is represented by subwatersheds 10-70 (Figure 5-1 of the "Final Modeling Report for Fecal Coliform TMDL Development for Leon River below Proctor Lake, Segment 1221"), which equates to one TMDL endpoint, at key water quality station 11932, Leon River at US Hwy 281, to measure compliance with the water quality standard, rather than five endpoints proposed for adoption and approval.
4. The limited discussion of nonpoint source contributions and BMPs to control these sources,	4. The TMDL report is a summary of modeling report and data collected. As such, it doesn't include all supporting data. Nonpoint source loads, presented as organisms per year, are tabulated for each land use category and for each stream reach in the "Final Modeling Report for Fecal Coliform TMDL Development for Leon River below Proctor Lake,

	Segment 1221", posted and available on the TCEQ web-page.
5. The lack of clarity on the relationship between the TMDL I-plan and the watershed protection plan,	5. The implementation plan and the watershed protection plan development will be coordinated. The TCEQ agrees that it may be unclear what the relationship is. The implementation plan will be formally adopted by the TCEQ and will include, at a minimum, enforceable actions that must be implemented by point sources in the watershed (CAFOs, wastewater treatment facilities, etc.) to address the impairment. The watershed protection plan may address multiple water quality issues of concern to the local stakeholders. Recommended actions in a watershed protection plan can be incorporated into the implementation plan.
6. The weakness of the public participation process because of inconvenient meeting times, locations, and ineffective publicity.	6. Throughout the term of the project, from 2003 to 2007, eight meetings were held to solicit public involvement. The initial meeting was held in Temple, Texas because at this phase of the project, the impaired reaches had not been confirmed to exist in the upper reach of the watershed. In response to supplemental monitoring data results, and concerns raised regarding meeting location, other meetings were held in Comanche and Hamilton, which were within or closer, to the impaired upper reach of the watershed. At each meeting, the project team received a great deal of involvement and comment from stakeholders. Attendance ranged from 40 to over 150 people. Reference materials such as, "Reducing Bacteria to Improve Water Quality in the Leon River: What You Need to Know", and the DRAFT Modeling Report, were posted on the project webpage to inform and provide the public the opportunity to submit formal comments. As a result of successful outreach, revisions to the model on behalf of stakeholder comments were made. The TCEQ continues to solicit involvement and recognizes that communication and comments from stakeholders in the watershed are vital to the success of this project. We understand meetings of this sort are often difficult to attend. We appreciate the time and commitment of participants in this process.
The City of Comanche, the City of Gustine and another stakeholder expressed a concern about additional regulatory requirements for municipalities.	The TCEQ appreciates the City's interest and commitment to protect water quality in this watershed. The TCEQ does not anticipate any changes to rules, laws, or regulations that would affect municipalities. It is anticipated that there will be a need for owners and operators of publicly owned treatment works to optimize wastewater management and

	to achieve a higher level of compliance with existing regulations and permits. To implement the TMDL, the TPDES permits may need revision to include effluent monitoring and reporting of *E. coli* concentrations.
The City of Gustine and another stakeholder noted that water quality data that is representative of seasonal variation and which better identifies loading sources more specifically is needed.	The water quality model accounts for the highest average bacteria concentrations, which occur during chronic wet weather events. Baseflow exceedance occurs regardless of season. Both baseflow and runoff events were taken into account during calibration of the water quality model. As discussed in earlier responses, the TCEQ expects additional data to be collected during the development of the watershed protection plan and utilized if need be, to recalibrate the model and determine source reductions in implementation.
The Texas and Southwestern Cattle Raisers Association also questions the cattle numbers used in the modeling assumptions.	The TCEQ attempts to utilize the best available and accessible information to estimate model inputs. In the instance of cattle or other livestock numbers there is no data source publicly available except at a county-wide level. The TCEQ agrees that more specific information, at a subwatershed level, would improve the model. TCEQ has indicated in several stakeholder forums that the agency would substitute more specific information if it were provided. There is an on-going watershed protection plan project that may get such specific information during the implementation phase.
The Texas Farm Bureau requested that: 1. Use Attainability Analysis to review the water quality standards should be conducted before the TMDL is approved. 2. Municipal discharges are required to treat the effluent so that no bacteria are discharged rather than the limit of 126cfu/100mL as recommended in the TMDL document.	1. See response above related to proposals for water quality standards changes. It should also be noted that should proposals for changes to contact recreational users be adopted and approved, this segment could be de-listed without the need for a use attainability analysis. 2. Municipal wastewater treatment facilities must achieve full and consistent disinfection of treated effluent at all times. When this occurs, microbes and bacteria are no longer measurable or exist at very low levels such as less than 5cfu/100Ml. The purpose of the TMDL is to set the loads as the maximum load that will achieve the water quality standard, not the maximum reduction that could be achieved. A municipal wastewater treatment facility that discharges at 126cfu/100mL will have no added contribution to the impairment. It would be contrary to the overall goal of a TMDL to establish a loading for any source at the

	most stringent allocation level possible. It is also worth noting that the wasteload allocation (WLA) for wastewater treatment plants in this TMDL as noted in Table 14 of the report is already less than 0.3% of the entire proposed allocation. If the allocation was 0.0%, it would have no practical effect on other pollutant sources identified in the load allocation (LA).
3. Wildlife contribution is addressed more directly.	3. The bacterial source tracking results for the two stations on the Leon River suggested that approximately 19% or more of the E. coli bacteria originated from wild animals. Wild animals are a source of surface water bacteria and therefore must be factored into the TMDL to determine the maximum bacterial load the segment can receive and still meet the water quality criteria for contact recreation. However, the TCEQ recognizes that implementing actions that would specifically target reduction of bacteria from wild animals would be challenging or impossible. Therefore, the focus of initial efforts to reduce the bacterial load should be on recognizable anthropogenic sources, such as WWTFs, CAFOs, septic systems, etc. Implementation should include additional data collection to guide the adaptation of implementation procedures that recognize and account for reductions from other sources.
The Texas Parks and Wildlife Department 1. supported moving forward with approval of the TMDL document. They noted that data to support estimates of contributions from wildlife are sparse or difficult to obtain and provided information on additional sources of information.	1. The TCEQ appreciates TPWD's support to move forward with the Leon River TMDL, and their assistance in the estimation of species in the watershed. Assistance from the TPWD in species identification is encouraged for development of the Implementation Plan.
2. They supported the sensitivity analysis, but noted that some data suggested greater variability than that used in the sensitivity analysis.	2. These are indeed wide ranges; reported values vary by a factor of 250, for the general category of rangeland runoff bacteria concentration. The selection of an appropriate range for variation of key modeling variables in the sensitivity analysis requires that the range be reasonable for that parameter, but a relatively small variation in a parameter value can produce a larger effect on simulated concentrations. For example, FSTDEC, the bacteria decay rate, varied + or - 50% from a calibration value of 0.7 per day, a very reasonable range that might realistically be encountered in the stream. This change in this single variable resulted in simulated mean concentration variation from about 200 to 450 cfu/100 mL on a sliding average. Multipliers developed from reported ranges in

	concentration would not necessarily be appropriate for application to the sensitivity analysis. In this case, if FSTDEC was multiplied by a factor of 250, or even 10, the value would be well outside of a reasonable range for that parameter and the sensitivity analysis would lose its value.
3. They also suggested that some rates for washoff might need to be reviewed.	3. Though land use washoff concentrations from reliable resources were simulated to calibrate parameters of the water quality model, enhancements, such as the order of washoff concentration rates from commercial/industrial areas and waste application fields, could be addressed further through the re-calibration of the model in implementation, to be more consistent with additional sampling data collected as a result of the WPP/I-Plan initiative.
United States Department of Agriculture 1. Noted the uncertainties associated with the development of TMDLs related to bacterial loads, and supported the need for adaptive management in the process. 2. They expressed the concern with the uncertainties associated with the evaluation of water quality impairments related to bacteria due to the lack of understanding in the scientific community regarding the survival, reproduction, and transport of bacteria. 3. They question the assumptions used in the modeling analysis to develop the load allocation. 4. They also expressed concern as to the treatment of data used in the modeling exercise as well as the model procedure itself.	1. The TCEQ is fully supportive of an adaptive management approach as a necessary implementation strategy. 2. TCEQ agrees and supports the collection of information and data which is needed to establish a better understanding of bacteria survival, reproduction, and transport. 3- 4. The TCEQ agrees that additional data will be a productive effort and such tasks are identified in the watershed protection plan project now underway including: • investigation of best management practices and treatment alternatives for bacterial sources in the watershed. • additional water quality monitoring to determine the magnitude and location of sources of bacteria. • enhancements to the water quality model to improve model resolution and to reflect data gathered during the WPP process. Enhancements to the water quality model, such as the assumptions used to provide the inputs related to washoff rates and numbers from

	various potential sources can and should be addressed further through the re-calibration of the model in implementation. Some of this re-evaluation may include consideration of other modeling procedures to provide more consistency with literature values or additional sampling data collected as a result of on going studies and the watershed protection plan initiative.
Other additional issues raised at the public meeting included: 1. Alternative approaches, such as use attainability analyses and sanitary surveys are available to support removal of the segment from the 303d list. 2. Ratios to convert fecal coliform data to *E. coli* data not appropriate. 3. Current permitting/enforcement authority of TCEQ does not require a TMDL to implement more restrictions to reduce bacteria from regulated sources.	 1. Section 303(d) of the Federal Clean Water Act requires all states to identify water bodies that do not meet, or are not expected to meet, applicable water quality standards. The compilation of impaired water bodies is known as the 303(d) list. For each Category 5a listed water body, states must develop a TMDL for each pollutant that contributes to impairment. The TCEQ is responsible for ensuring that TMDLs are developed for impaired surface waters in Texas. The TCEQ recognizes there are alternative approaches and other means to assess water quality. UAAs and sanitary surveys can be employed to evaluate achievement with water quality criteria. Under current EPA regulations these are not acceptable approaches for delisting a segment from the 303(d) list. 2. HSPF is considered by experts to be one of the most comprehensive and flexible models of watershed hydrology and water quality available. However, this approach also requires a larger amount of input data to support the modeling analysis. When this project was initiated, there was insufficient *E. coli* data available to complete a valid assessment and modeling analysis. Literature values available to complete existing data gaps were reported as fecal coliform, rather than *E. coli*. TCEQ recognizes that the calculated conversion factor might not reflect a fecal coliform/*E. coli* relationship as accurately as may be desired, but the ratio is consistent with data from other watersheds. 3. The TCEQ recognizes that further action can be taken to directly address regulated point sources at any time. Such action is more justified when based on a TMDL technical analysis to support additional requirements for load reductions. Not all loading originates from point sources; therefore, equity requires consideration and possible reductions from other potential sources. State and federal regulatory authority of

	nonpoint source pollution is limited and is not expected to be expanded as a result of this analysis. Other than for nonpoint sources subject to TCEQ regulation, such as CAFO waste application fields and on-site septic systems, it is anticipated that any other nonpoint source pollutant reductions necessary can be accomplished through voluntary effort and integrated into the implementation process with stakeholder oversight and guidance.
4. TMDL is a covert attempt to regulate nonpoint sources. Junk science used inappropriately. Results were predetermined.	4. The TCEQ does not agree with this comment.
5. Inconsistent with Bacterial Task Force recommendation for social and economic attainability of TMDLs.	5. In the 2007 Bacteria TMDL Task Force report, the decision criteria, "social and economic attainability" is used as justification to move to the next tier of data gathering. The Bacteria TMDL Task Force document does not preclude development of a TMDL because of social and economic factors. The proposed reductions for wastewater treatment facilities are currently permit requirements and should be attainable. The recommended 21% reduction by CAFO waste application fields should also be attainable. The recommended 21% reduction for other nonpoint sources is likely to be socially and economically attainable, so long as stakeholders become engaged in the watershed protection plan process and develop voluntary reduction strategies that are supported by state and federal cost share programs and other available publicly financed incentives.
6. Did not include reduction requirement for wild animals, therefore costs for reduction are unwarranted.	6. Though wildlife deposition represents a background condition, it is an existing condition that must be accounted for in the TMDL. In response to similar comments during development of the TMDL, the TCEQ conducted an exercise and presented results to stakeholders at the October 10, 2007, stakeholder meeting convened in Hamilton, Texas. As demonstrated in that presentation, removing wildlife from the LA would reduce the allowable allocation and increase the percent reduction from anthropogenic sources. As expressed at that meeting, this result was unfavorable to stakeholders in the watershed because it would increase their economic burden.

7. Inadequate/inconsistent data used to determine impairment and to develop modeling analysis. Used single station data to characterize the watershed. Figure 7 is inaccurate – lower segment should also be impaired if 71% of drainage is range land.	7. The TCEQ does not agree with this interpretation. Data from more than one sampling station was used for the assessment. One of the first steps in the development of a TMDL for impaired water bodies is to determine the availability of historical water quality data and the need for additional data to conduct analysis. Data for each monitoring station in the project area were analyzed in past and present assessments. For the purposes of this project, this database covered a period of 1996-2004. Additional data was collected to conduct the watershed modeling exercise. Because of resource limitations, sampling stations are selected to provide data that is most likely to be representative of the water quality in a particular subwatershed. Subwatershed delineation contributes to the calibration of model parameters used in the analysis. The simulated loads for the impaired reach of the Leon River are presented in Figure 7 to represent the total annual averages that enter the impaired stream from various sources. For each subwatershed this was accomplished for washoff loadings that allow specification of a percent load removal by land use category. These land-based loadings originate via washoff of bacteria from land surfaces in the watersheds of the impaired reach under rainfall runoff conditions. Land use categories within the impaired reach do not reflect a constant load, but instead are driven by inventories and loading rates which differ for each subwatershed based on these inputs.
8. Cities required to bear the brunt of reduction costs, even though they are not a major contributor. Public funding for infrastructure is needed.	8. The TCEQ appreciates the resources that cities in the watershed have committed to treatment of wastewater and recognizes that more consistent compliance at a higher level would add to the financial burden of wastewater treatment. It is anticipated that during the implementation phase of the project (which includes the development of a watershed protection plan) that the contribution from wastewater treatment plants will be further evaluated to determine what, if any, changes need to be put in place to meet reduction recommendations of the TMDL. The existing guidelines for a watershed protection plan include the identification and evaluation of potential funding sources for implementation of any corrective action to meet reduction goals of the TMDL.

9. Watershed protection plan proposed by Brazos River Authority should provide reductions and should be allowed to proceed. 10. Watershed protection plan being developed under BRA contract is supported by community.	9 & 10. The TCEQ supports efforts of the BRA to develop a watershed protection plan, and will work closely with the agencies involved to make it the framework for implementation of equitable actions necessary to meet the goals of the TMDL. The TCEQ appreciates the support of stakeholders in the watershed for this effort and is committed to continue active participation in the project including initiating any changes in the TMDL reductions that may be recommended as a result of additional information gathered in the project.