

North Bosque Watershed TMDL Implementation Plan

Response to Comments

December 10, 2002

General		
Sources	Comment	Response
<p>Darren Turley, TFB July Danley, TriCounty Ag Assoc. Joe Huddleston, Ag Texas Farm Credit Srv John Cowan, Dairy Farmers of America/TAD</p>	<p>Erath Co dairies have moved forward to address environmental issues, and are ahead of most of the world. Regulatory changes have come faster and “more harshly” than most places in US. Dairy industry is willing to do things to comply, but please be fair and just. Producers still in the area are committed to preserving their livelihoods and are currently spending hundreds of thousands of dollars to improve operations above and beyond the current rules and regulations. Sufficient time needs to be allowed for dairy industry to adapt to changes, or industry and economy will suffer. Besides time, economic assistance should be available for individuals required to implement mandates. Second phase activities to further limit dairy industry should await solid evidence of need, and must be economically feasible.</p>	<p>The Texas Commission on Environmental Quality (TCEQ) is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state. No changes.</p>

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<p>Darren Turley, TFB July Danley, TriCounty Ag Assoc.</p> <p>Jeff Sandford, S'ville Chamb of Commerce Joe Huddleston, Ag Texas Farm Credit Srv</p> <p>Margaret Wallace, small business operator</p> <p>Carroll Cawyer, Restore Constitutional Government, Inc. Linda Escalante, citizen Clint Barber, citizen</p>	<p>Changes already occurring have affected or may affect the local economy. In year 2000, dairy industry had an economic impact of \$543 million, or 36% of the total Erath Co output. County has already lost close to 100 dairies and 10,000 cows over the past several years. Numerous other small businesses depend on spending by dairies and employees. Dairy industry provides or supports 5,912 jobs in Erath Co, 31% of all employment; additional impact occurs beyond Erath Co. In the last two years, more than 600 dairy and related jobs have been lost.</p> <p>Erath Co had 216 dairies in 1993, now down to 117. In 1985, it cost \$0.75 to produce \$1.00 worth of milk, today it costs \$0.96. The industry is “in a survival of the fittest period.” For each 1,000 cows that leave Erath Co, the county loses \$2.4 million of county income, 61 jobs – and 10,000 cows have already been removed.</p> <p>Loss of farm jobs directly affects other small businesses. “Walk in our footsteps” and have compassion for people and small business before imposing more regulations that will harm the local economy and people’s lives.</p> <p>Once the dairy industry is destroyed, it cannot readily be replaced. Environmental regulations have gone too far, and are too hard on the people. Stephenville is a lovely town, but regulations are closing businesses, could make the place a “ghost town.”</p>	<p>TCEQ is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state. No changes.</p>

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<p>July Danley, TriCounty Ag Assoc. Jeff Sandford, S'ville Chamb of Commerce Joe Huddleston, Ag Texas Farm Credit Srv John Cowan, Dairy Farmers of America/TAD W. L. Nix, citizen of Stephenville</p>	<p>Any business that fails to meet a set of standards should be penalized. But, dairy producers that are operating to meet all requirements of current rules and regulations should be allowed to continue doing business. TCEQ should fairly and equitably issue renewals, certifications, and expansions to dairies "that are doing their job of being environmental stewards of the land." If good dairies are unable to continue growing, Erath Co will suffer.</p> <p>TCEQ is acknowledged by dairies to be the regulatory authority. Dairies that are in compliance with current regulations should be assured they can continue to operate without reprisal or harassment by others, unless or until a dairy has been proven through due process to have violated the terms and conditions of its permit or authorization.</p>	<p>With the adoption of rules related to compliance history and environmental management systems, TCEQ has established criteria to consider a permitted facility's past compliance history and to recognize those operations which achieve or go beyond operational goals for environmental protection. Applications for new, renewed, or amended authorizations are processed in accordance with applicable regulations and evaluated for compliance with those regulations. As part of this process TCEQ considers an applicant's compliance history. This is accomplished using the criteria specified in 30 Texas Administrative Code (TAC) Sections 60.1 and 60.2 as required by Texas Water Code (TWC) Chapter 5, Subchapter Q Performance-Based Regulation. Violations of any permit or any documented unauthorized discharges of waste identified during investigations or compliance determinations are evaluated using TCEQ's Enforcement Initiation Criteria (EIC). The EIC guidance document establishes the procedures for determining the severity of enforcement actions. No changes.</p>
<p>John Cowan, Dairy Farmers of America/TAD</p>	<p>Equal and fair allocation of responsibility is essential for long-term progress to be realized. This is a community-wide issue and it requires community-wide responsibility to take care of it.</p>	<p>Fair and appropriate allocation of responsibility is important, and the draft Implementation Plan (IP) seeks to accomplish the goals of the total maximum daily loads (TMDLs) in such a manner. The TMDLs and IP processes have been established with this as a goal. The TMDLs identify sources of pollutants on a broader scale and the IP provides strategies for reductions. Public input is actively solicited in the development of both, in part to ensure fairness in allocating responsibility. No changes.</p>
<p>Willy De Jong, Tx Assoc of Dairymen</p>	<p>"The plan, as proposed, should be effective in achieving the objectives of reducing concentrations of phosphorus in the . . . Bosque River." The Texas Association of Dairymen (TAD) "endorses the plan's reliance on voluntary efforts of owners and operators of agricultural point and non-point discharges."</p>	<p>The IP's goal is to effectively reduce phosphorus loading and long-term phosphorus concentrations, and other pollutants as well. TCEQ encourages voluntary efforts by agricultural operators; mandatory requirements or rule changes may be necessary if voluntary efforts are not adequate. No changes.</p>

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State Representative Jim Dunnam Carson Hoge, Waco Chamber of Commerce	“No one really concerned about the cost of controlling pollution in this watershed would pass on to the citizens of Waco the one quarter million dollars per year that it costs them just to deal with the taste and odor problems caused by the dairy wastes flowing to Lake Waco, much less expect them to pay up to \$80 million for a new water treatment system to protect them from the pathogens coming from these dairies.”	The 2002 Water Quality Inventory indicates that Lake Waco (Segment 1225) and the mainstem North Bosque River (Segment 1226) meet criteria to support all uses, including public water supply and contact recreation, based on data from March 1996 through Feb 2001. That is, water quality in these two segments is not impaired. No changes.
Ron Jones, TIAER	Implementation efforts should be “transparent”, like all good government. Those charged with responsibility for implementation should answer, in terms of progress and efforts, to a very small executive committee of 7 to not more than 10 people.	TCEQ and the Texas State Soil and Water Conservation Board (TSSWCB) will retain primary responsibility for administration and oversight of implementation activities and TCEQ will remain the legal authority for enforcing implementation. No changes.
Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce	The plan is so weak that it undercuts efforts and momentum to move forward, just as the City of Waco, Dairy Farmers of America, Texas Farm Bureau, Brazos River Authority, and private industries are beginning to work together to find a solution.	The IP has been developed to include a variety of regulatory and voluntary actions that can be implemented to address water quality problems in this watershed. The IP is designed to allow the agency to make adjustments necessary to expand actions that have a positive impact on the water quality of the river or make regulatory changes as necessary. TCEQ also continues to evaluate incentives which will encourage and support voluntary efforts by all stakeholders to achieve the goals of the TMDLs. No changes.
Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce	Historical performance of TNRCC/TCEQ, disregard for previous comments by Waco, and this weak plan, “demonstrates an appalling indifference to downstream interests.”	TCEQ has considered all comments received during development of the TMDLs and this draft IP. The TMDLs, as required by the Clean Water Act, and the IP address the impairment in Segments 1226 and 1255. The draft IP does not address Lake Waco, which meets all criteria to support all its designated uses. No changes.
Ricky Garrett, Utility Director City of Waco	Bacterial concentrations are also a concern in the watershed. It is good that the draft plan acknowledges that, but the plan only seeks that land application rates be in accord with effective nutrient management practices.	Nutrient management measures in the IP will also have strong corollary effects that reduce bacterial loading. Effective nutrient management practices also reduce the export of bacteria from waste application fields (WAFs). Discharges from runoff control structures will be significantly reduced which will reduce bacterial loading as well as nutrient loading. No changes.

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Bill Barrett, citizen/rancher	Those that benefit from use of the river for water supply need to help the dairies “clean up” while allowing them enough profit to remain in business. One way would be for water users to pay for equipment to convert biomass (manure) to electricity (estimated to be no more than \$15 million), and to purchase electricity (at 7 cents per Kw/hr, above market rate). Dairies could profit, while removing waste, and pay back equipment cost in about eight years.	TCEQ encourages watershed interests to attempt or continue innovative ideas that contribute to attainment of water quality goals. The IP allows for new approaches or alternatives, voluntarily developed by watershed interests, that will enhance efforts to reduce loading and improve water quality, and will cooperate with such efforts to the extent possible. No changes.
Pete Schouten, Erath Co. dairyman Ed Mayfield, citizen (Waco) Dean Schouten, Erath Co. rancher	Erath County dairy farms are not the only source of phosphorus to Lake Waco. There is a lot of rich farm and grazing land around the lake and along the lower Bosque River. Farms, septic tanks, municipal debris were covered by Lake Waco when it was built to its current level. “Dairyman are stewards of the land” that work hard at doing everything right, and drink the local water. “I urge you to re-examine and explore the real cause of Lake Waco’s water problems.” The dairy industry should not be singled out as the only reason for Lake Waco being high in phosphorus. Other urban and rural land uses also contribute. Other water supplies have taste and odor issues, without blaming them on agricultural sources.	The TMDLs recognize that land uses other than dairy farming are sources of phosphorus loading, as well as other pollutants. The TMDLs and IP address the most controllable sources, with the primary objective of improving water quality in the North Bosque River and its tributaries. No changes.
Paul Holroyd, Director of Community Services City of Hewitt	“Creeks are running almost completely full of liquid animal waste. It’s a terrible situation, and not only is it affecting the quality of the water as to taste and odor, but there is great potential that with this many intestinal discharges into the water that we can get into some pathogens that chlorine will not kill, and we could lose some lives if this pollution continues.”	The 2002 water quality inventory indicates that the mainstem North Bosque River (Segment 1226) and Lake Waco (Segment 1225) fully supported both public water supply and contact recreation uses. These segments attain water quality standards for bacteria that are developed to be protective of human health and the environment. No changes.

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Win McAtee, citizen of Waco	Groundwater quality appears to be mostly ignored in the CAFO regulations and the TMDL. The Trinity sands serve as a major aquifer and recharge area in the upper Bosque River watershed. Only one CAFO lagoon is being monitored for groundwater impacts. “The Commission’s lack of monitoring the aquifer shows lack of seriousness of protecting our water.”	30 TAC Chapter 321, Subchapter B includes provisions that are specifically related to groundwater protection, such as lining requirements for retention basins and application rates for waste and wastewater. During the development of technical data to support CAFO permits, these rules require an evaluation of potential groundwater impacts from the facility and the waste management procedures that will be used for the operation. The pollution prevention plan regulatory requirements also include provisions for groundwater protection. No changes.
Richard Howard, Lab Supervisor City of Waco	The TMDL needs to be based on good science. The implementation plan should be apolitical – “we need to be able to kind of separate the politics away from the actual science.”	The TMDLs and IP are based on the best science available. TCEQ is committed to further data collection, refinement of the models, and other scientific efforts. No changes.
Justin Taylor, Sierra Club Lone Star Chapter Dennis Cogliati, Mayor of Lacy Lakeview	Under this plan, only municipal wastewater treatment plants are required to reduce their phosphorus loading, and they contribute only ten percent of the phosphorus entering the river. A disproportionate and unfair amount of the responsibility and cost is shifted to cities, while doing little or nothing to restore water quality.	The IP also includes voluntary best management practices (BMPs) to be implemented by agricultural interests in the watershed. The TSSWCB will oversee and promote these activities. The IP is specifically set up in phases with Phase 1 including both the BMPs and decreased phosphorus loadings from municipal wastewater treatment plants. If these measures are not effective at sufficiently reducing loadings, additional requirements may be implemented. TCEQ has committed to evaluating the need for any such additional Phase 2 measures on an ongoing basis. No changes.
Addis T. McNamara, citizen of Waco	Economics has always been a major factor when programs changed waste or risk management practices, as in onsite sewage rules, underground storage tank program, etc. In this case, consumers of milk should pay for the solution to the degree that milk production has caused it, while water consumers should pay for the solution to the extent that municipal wastewater treatment plants have caused it. Gasoline consumers have been paying 7/10 cent per gallon to support the underground storage tank clean up; perhaps “we should look at that model relative to the consumption of milk as well as to the consumption of water.” Resulting funds could support clean up of the North Bosque watershed. TCEQ should consult with the individuals behind some of those successful programs.	TCEQ is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state. However, establishing taxes on milk or water to support such a program is beyond TCEQ’s authority. No changes.

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Tom Ramsey, citizen of Waco	Cost to the CAFOs to clean up its pollutants should not be a concern of the TCEQ, since it is the cost of doing business. "Raise your price, pass it to the consumer."	TCEQ is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state. No changes.
Brown/McCarroll LLP for City of Waco	Despite the absence of specific regulatory controls on CAFOs, the draft implementation plan is a proposal for TCEQ adoption of a "rule" as defined by the Texas Administrative Procedure Act (APA) and must be adopted following the requirements of the Texas APA. If those procedures are not followed, any rule contained within this implementation plan will be invalid.	The IP is not subject to the rulemaking requirements of the Texas Administrative Procedure Act (APA). The Texas APA defines "rule" as a "...state agency statement of general applicability that implements, interprets, or describes law or policy" or "describes the procedure or practice requirements of a state agency." Texas Government Code Section 2001.003(6). The IP does not implement, interpret, or prescribe law or policy. It is a strategic planning document for use by appropriate state agencies, which includes a description of potential regulatory and voluntary strategies to achieve the pollutant reductions identified in the TMDLs. All necessary rulemaking identified in this planning document will be conducted in accordance with the Texas APA. No changes.
Brown/McCarroll LLP for City of Waco	Any authority that TCEQ may have to adopt this plan has been delegated unconstitutionally to the TCEQ, because the Texas Legislature has provided no standards to guide the agency in adopting an implementation plan to achieve a TMDL. Any delegation of legislative authority that TCEQ may invoke would violate Article II, Section 1 and Article III, Section 1 of the Texas Constitution. TCEQ is operating entirely without direction from the Texas Legislature, and without any criteria or other direction from previously adopted rules of its own.	The legislative directive to TCEQ is sufficiently specific in stating the duties of TCEQ regarding water quality and does not violate the Texas Constitution. State law authorizes TCEQ to develop TMDL implementation plans. As more thoroughly described in the Legal Authority section in the IP, TCEQ's legal authority to develop TMDL implementation plans was provided by the Texas Legislature in the Texas Water Code (TWC), including TWC Sections 26.011, 26.0135, 26.036, 26.0136, 26.127, 26.012. No changes.

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Brown/McCarroll LLP for City of Waco	If this plan were adopted, TCEQ would be acting arbitrarily and capriciously and beyond the scope of its legal authority, as established by the United States Environmental Protection Agency (EPA) approval of the TMDLs. EPA approval stated an understanding that the TMDL did not allocate any loading to lagoon discharges, so no additional discharges from CAFO lagoons may be authorized, by permit or by registration. The implementation plan has proposed no elimination of the wastewater discharges currently allowed from CAFO lagoons due to “chronic” or “catastrophic” rainfall events in permits or registrations.	TCEQ neither developed the TMDLs for the purpose of, nor understood that EPA approval of the TMDLs was based upon, prohibiting future permitted discharges from retention structures during chronic or catastrophic rainfall events. The TMDLs do include loading due to lagoon discharges. As stated on page 6 of the IP, “All loadings that emanated from any aspect of a dairy operation during the monitored period were addressed in the analyses as WAFs...” Therefore, loadings from lagoon discharges due to chronic or catastrophic rainfall events as authorized in permits and registrations were included in the TMDLs. No changes.
Brown/McCarroll LLP for City of Waco	If this implementation plan were adopted as drafted, it would constitute a declaration by the TCEQ that it was ignoring 40 CFR Section 122.4(i) as incorporated into TCEQ rules by 30 TAC Section 305.538 which precludes TCEQ from issuing a permit (or a registration) to a “new source” or “new discharger” that would further contribute to impairment of the river.	TCEQ is complying with 40 Code of Federal Regulations (CFR) Section 122.4(i) as incorporated into 30 TAC Section 305.538. TCEQ permitting decisions are made in accordance with these regulatory provisions to ensure that water quality standards will be protected and that all applicable Clean Water Act requirements will be met. No changes.
Brown/McCarroll LLP for City of Waco	The TCEQ is ignoring 40 CFR 122.4(a), 122.4(d), and 122.44(d), as incorporated into state rules, which require that compliance with state water quality standards must be ensured in all discharge permitting.	TCEQ is complying with 40 CFR Sections 122.4(a), 122.4(d), and 122.44(d). All TCEQ permitting determinations are made in accordance with these regulatory provisions to ensure that water quality standards will be protected and that all applicable Clean Water Act requirements will be met. No changes.
Brazos River Authority	The Brazos River Authority is promoting the use of other measures that can contribute to reducing instream phosphorus concentrations and loading. Those measures include stream bank restoration, on and off channel wetlands or ponds, prescriptive riparian land use, and chemical precipitation of phosphorus in tributaries or the North Bosque River. These measures could be focused or clustered within selected microwatersheds for rapid and measurable improvement of water quality.	TCEQ acknowledges and appreciates the efforts of the Brazos River Authority to initiate, participate in, and support actions which will contribute to the reduction of phosphorus and other contaminants in the river and the protection of the resource. TCEQ is committed to providing support and coordination with these projects. The IP has been developed to allow sufficient flexibility so that a variety of voluntary and regulatory efforts can be combined to achieve the goal of phosphorus reduction and restoration and protection of this resource. No changes.

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Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department (TPWD) is concerned that the plan focuses on phosphorus concentrations in the river rather than protecting uses of the river. Discussion of control actions and measures should include consideration of how such controls and measures will result in the North Bosque River achieving its aquatic life and contact recreation uses. The TPWD is concerned that the river may continue to not meet “fishable/swimmable” goals even while phosphorus goals may be met, particularly in the Upper North Bosque River. The plan should discuss how this situation would be addressed.	As determined by the 2002 water quality inventory, the North Bosque River has met criteria for contact recreation and public water supply uses. The Upper North Bosque and several tributary streams at least seasonally do not meet the contact recreation criteria; however, efforts to reduce nonpoint source phosphorus loading will also significantly help meet contact recreation goals. Concerns regarding aquatic life use of the Upper North Bosque reaches are based on limited data and to some extent reflect the natural limitations of flow regime and channel morphology. Continued monitoring and assessments will focus efforts on other uses as established by TCEQ program guidance and methodologies. No changes.
Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department (TPWD) states that the plan should include a discussion of how pending adoption of state or federal numeric nutrient criteria would affect implementation.	The form and impact of future nutrient criteria cannot be determined. No changes.
Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department urges that nutrient impacts in Lake Waco be explicitly considered in the plan.	The 2002 water quality inventory indicates that Lake Waco has supported all designated uses. A TMDL for Lake Waco is not needed at this time. No changes.
Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department recommends that the plan specify an absolute maximum concentration, or a seven-day average maximum concentration, that would trigger immediate action.	Phosphorus compounds that occur and are monitored in water bodies are not toxic or acutely dangerous. Laboratory analyses usually takes several days to weeks; therefore, stream monitoring would not provide “immediate” information. Continuous “real time” monitors for phosphorus are currently of marginal reliability and extremely expensive for the quality of information they can provide. It is unclear what kind of immediate action, if suggested, would be needed or possible considering the nature of phosphorus sources. No changes.
Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department believes the plan should contain a discussion of how other water quality data, particularly that collected by TCEQ staff during complaint investigations, could be used to assess whether TMDL goals are being met.	Information or data from complaint investigations may point to sources that require additional attention or control, or may affect permit actions for facilities that have performed poorly. However, the success of the TMDLs and IP must be assessed based on long-term watershed-wide trends and conditions, and assessments must recognize that operational failure at one specific site does not constitute failure of the IP nor inadequate progress towards its goals. No changes.

Comprehensive Nutrient Management Plans		
Sources	Comment	Response
Darren Turley, TFB John Cowan, Dairy Farmers of America/TAD	Nutrient utilization plans are a promising way for dairymen to better control all nutrients, including phosphorus, and will be largely accepted by the dairy business. Dairy farmers will manage animal nutrition, when reasonably affordable and consistent with good management practices and herd health, to minimize phosphorus excretion.	Both TSSWCB and the dairy industry have been working to develop comprehensive nutrient management plans for dairy facilities in this watershed. TCEQ will continue to work with dairy operators, the TSSWCB, and the Texas Cooperative Extension to develop site specific plans and training to enhance implementation and maintenance of these plans. TCEQ has committed to providing training credits for operators that participate in the assessment process, comply with recommendations of assessment, and develop and successfully implement and maintain a comprehensive nutrient management plan. TCEQ will also continue to work with the Texas Cooperative Extension to expand and update training programs which meet the requirements in 30 TAC Chapter 321, Subchapter B. Topics such as nutrient management and dietary management to assist with achievement of efficient nutrient utilization and reduction of waste will be continued. Dairy operators are encouraged to employ any applicable dietary management controls which will contribute to waste reduction without endangering the health of the animals or productivity of the facility. No changes.
Ron Jones, TIAER	The 503 program should be used as part of the implementation plan.	The TSSWCB's Water Quality Management Program, which was enacted by the 73rd Texas Legislature through S.B. 503, provides for the development and certification of Water Quality Management Plans (WQMPs). The IP includes WQMPs as the main mechanism for the abatement of non-point source pollution resulting from the application of manure, wastewater, and commercial fertilizer on lands not associated with an animal feeding operation. The IP also states that TSSWCB will continue to promote the voluntary development and implementation of WQMPs for animal feeding operations of a size not requiring an authorization. No changes.

Micro-watershed approach		
Sources	Comment	Response
Ron Jones, TIAER Larry McKinney, Texas Parks & Wildlife Dept.	Microwatershed concept is key to a successful program. It provides ways to cope with some complexities, and to quickly show results or lack thereof, and provides for targeting future efforts. The Texas Parks and Wildlife Department supports the microwatershed approach described in the plan.	TSSWCB's microwatershed approach, as described in the IP, will support and enhance implementation efforts. No changes.

Removal of 50% of CAFO manure (Composting)		
Sources	Comment	Response
Ron Jones, TIAER Darren Turley, TFB Cody Johnson, Texas Best Compost Steve VandenBerge, Tx Assoc of Dairymen John Cowan, Dairy Farmers of America/TAD W. Leon Smith, Mayor of Clifton Truman Blum, citizen (former mayor Clifton) Linda Ethridge, Mayor of Waco	The compost haul-out program is good, and should continue. It would be very difficult to reach the objectives of the TMDL without a successful haul-out program. Haul-out program is and will be a very big key issue for dairies. TCEQ should help expand the possibilities of the program to truly make a difference in the Bosque watershed. Dairies are already using the compost haul-out program. Efforts to create a sustainable market for compost should continue. Compost program may not be a reliable way to achieve goals if funding is not assured. The compost program has been "the one bright light in a dismal landscape" during the past decade.	TCEQ recognizes that the compost haul-out program can significantly contribute to implementation of the TMDL goals, and is making all appropriate efforts to continue the program's success. The compost haul-out program is being supported with federal funding until August 2004. After that date, the project is designed to be self-sustaining. The TCEQ Composted Manure Incentive Program (CMIP) is continuing and intensifying its efforts to build sustainable markets for compost. TCEQ has engaged the Texas Cooperative Extension to conduct a large demonstration, education, and marketing campaign, which is just getting under way, for composted manure in the North Bosque River region. The Texas Department of Transportation has stated and demonstrated its intention to continue using large volumes of composted manure after the TCEQ purchase rebate is discontinued. This market-driven program was designed to provide start-up incentives to help foster an independent, private composting industry in the region and then to phase out the incentives and assistance as the industry becomes established and sustainable as a competitive alternative for manure management. No changes.

Removal of 50% of CAFO manure (Composting)		
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Cody Johnson, Texas Best Compost	Compost haul-out program “is in the process of being methodically deconstructed by the officials who have helped create it.” Relationship between composters and TCEQ has become adversarial, permit requirements and rules change continually, promises are broken. Program should “be allowed to work the way it was designed to” instead of “choking it to death with more needless restrictions.”	The compost haul-out program has worked well and is continuing to work well. However, some changes and “growing pains” are unavoidable as large programs like this develop, and TCEQ intends to continue the program and improve it where possible. No changes.
Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce Wiley Stem, Waco Assistant City Manager	Contribution of the compost program “just doesn’t work” mathematically. Plan speaks of half of the waste being removed, or sometimes half of the collectable waste. “According to your documents, only 43 percent is collectable. So you’re going to apparently try to get to a 50 percent reduction by suggesting that people haul out half of their 43 percent.” The plan needs to require 100 percent haul-off of solid wastes from CAFOs. “To get your 50 percent reduction of solid waste, you need to do 100 percent haul-off because only 43 percent is collectible.”	A Brazos River Authority (BRA) study derived an estimate that 43% of dairy manure can be collected for composting. Collecting half of the collectible manure would, as the commentators suggest, remove only about 21.5% of the WAF gross loading. However, the experience of the CMIP suggests that the collectible fraction of area dairies is higher than 43%, and could be even higher if more dairy operations adjusted their solid manure collection practices to minimize sand, rock, and mud contamination. The illustrative discussion presented in the IP suggests an actual removal of 30% of WAF gross loading through the haul-out project, which is certainly feasible. In the first two years of the CMIP, almost 600,000 tons of manure were hauled from North Bosque and Leon River watershed dairies to compost facilities. The BRA study estimated that Erath County dairies produce only about 190,000 tons of collectible manure per year. If this program is not able to entirely achieve the desired contribution to load reduction, other elements of the IP can be adapted to support attainment of the TMDL goals. No changes.
William L. Clifton, Waco Industrial Foundation	Performance of compost haul-out program should be determined early in program, but plan “wants to wait for years before success or failure is determined.”	There is a difference between monitoring program success, in terms of the quantity of manure composted or removed from the watershed and monitoring water quality response at downstream sites. Programmatic success can be determined relatively quickly, and the compost haul-out program has already demonstrated that large amounts of manure are being removed. Determining water quality success, especially when measured as annual average values, requires some time for effects to propagate downstream. No changes.

Waste Water Treatment Plants		
Sources	Comment	Response
<p>Jerry Golden, Clifton City Administrator John Moser, Mayor of Stephenville W. Leon Smith, Mayor of Clifton Clarence Fields, Goodall Witcher Hospital Foundation Tom Nichols, Clifton Chamber of Commerce</p>	<p>The cost of phosphorus controls on city WWTPs is a concern due to its impact on taxpayers and ratepayers. “We want the dairy industry to thrive, but we don’t want to see it supported on the backs of taxpayers and ratepayers of cities just because we are available in measurable targets.” The cost of treatment systems “to meet constantly evolving phosphorus or other standards is burdensome.”</p>	<p>TCEQ is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state.</p> <p>The IP recognizes that controls or additional controls may be necessary for municipalities to meet the mass loadings they would be allocated. However, the IP allows municipalities flexibility in determining the most appropriate and cost effective strategy. This is a change in the IP, made in response to comments.</p>
<p>Glenn Breisch, City of Cranfills Gap</p>	<p>Community of Cranfills Gap has fewer than 500 people, and WWTP is not yet built, but IP proposes phosphorus concentration limit. Permit was issued presuming that impact of discharge would not reach the North Bosque River, but something seems to have changed since then. Please reconsider plan for Cranfills Gap and “try to help us out as well.”</p>	<p>Upon approval of the IP, TCEQ will initiate minor amendment actions for permittees which do not currently have phosphorus limits consistent with the Phase 1 plan in order to make the permits consistent with the Phase I municipal wasteload allocation. The City of Clifton permit currently has a phosphorus limit which is consistent with (i.e. less than) the allocation; a major amendment action is necessary to change the Clifton permit to the load limit and conditions for Phase I. The Phase I Clifton permit amendment action will begin when the City of Clifton initiates a major amendment application. The initial load allocations for each city are shown in Table 4. The permits will be drafted to state that when the self-monitoring data indicates that the discharge has reached 100% of the loading rate specified in Table 4, based on the daily average for three consecutive months, the permittee shall within 90 days submit a plan to achieve compliance with the load limit on a continuous basis OR to achieve a concentration limit of 1 mg/l based on the permittee's requested design capacity flow. Upon review TCEQ of the plan, permits will be drafted to include either a phosphorus load limit on a continuous basis or a phosphorus concentration limit of 1 mg/l. This is a change in the IP, made in response to comments.</p>

Waste Water Treatment Plants		
Sources	Comment	Response
<p>State Representative Jim Dunnam Carson Hoge, Waco Chamber of Commerce</p> <p>Bobby Conrad, Bosque County Judge John Moser, Mayor of Stephenville</p>	<p>It is unfair and inappropriate to require cities to spend large amounts of money on wastewater treatment plant improvements, when they are only one-fifth of the controllable loading.</p> <p>Please be fair in the implementation plan, we hope “that these communities don’t have to invest hundreds of thousands or even millions of dollars to upgrade facilities that may or may not affect the river.” “If a rule or regulation can be clearly proven to benefit the river or Lake Waco, please push it forward, but if it’s not beneficial and you cannot prove specifically that it helps, don’t ask our people to fund these things.”</p>	<p>TCEQ is committed to protecting human health and the natural resources of the state taking into consideration the economic development of the state.</p> <p>The IP recognizes that controls or additional controls may be necessary for municipalities to meet the mass loadings they would be allocated. However, the IP allows municipalities flexibility in determining the most appropriate and cost effective strategy. This is a change in the IP, made in response to comments.</p>
<p>W. Leon Smith, Mayor of Clifton David Anderson, Clifton City Council</p> <p>Truman Blum, citizen (former mayor Clifton)</p>	<p>City of Clifton supports the part of the plan that delays phosphorus limitations at most small cities, and infers that Clifton is to be released from its present phosphorus permit as well. The City of Clifton wants this confirmed in writing, with procedures and timetable for modifying its permit clearly stated.</p> <p>All cities, including Stephenville and Cranfills Gap, should have phosphorus limits deferred. If phosphorus limits are placed in city permits, each city should be provided the option of choosing between limits stated as loads (pounds per day) or concentration (milligrams per liter).</p> <p>The implementation plan should contain specific language that directs the Clifton permit to be modified or amended to duplicate the requirements of Hico, Iredell, Meridian, and Valley Mills.</p>	<p>Upon approval of the IP, TCEQ will initiate minor amendment actions for permittees which do not currently have phosphorus limits consistent with the Phase 1 plan in order to make the permits consistent with the Phase I municipal wasteload allocation. The City of Clifton permit currently has a phosphorus limit which is consistent with (i.e. less than) the allocation; a major amendment action is necessary to change the Clifton permit to the load limit and conditions for Phase I. The Phase I Clifton permit amendment action will begin when the City of Clifton initiates a major amendment application. The initial load allocations for each city are shown in Table 4. The permits will be drafted to state that when the self-monitoring data indicates that the discharge has reached 100% of the loading rate specified in Table 4, based on the daily average for three consecutive months, the permittee shall within 90 days submit a plan to achieve compliance with the load limit on a continuous basis OR to achieve a concentration limit of 1 mg/l based on the permittee's requested design capacity flow. Upon TCEQ review of the plan, permits will be drafted to include either a phosphorus load limit on a continuous basis or a phosphorus concentration limit of 1 mg/l. This is a change in the IP, made in response to comments.</p>

Waste Water Treatment Plants		
Sources	Comment	Response
Truman Blum, citizen (former mayor Clifton)	TCEQ failure to complete the TMDL implementation plan in a timely manner has jeopardized the availability of funds to assist the cities in modifying the wastewater treatment plants to meet anticipated TMDL requirements. Those funds may not be available after August 2003.	The Texas Water Development Board has taken all necessary action to ensure that the funds will carry over until utilized. A request to provide this funding for Fiscal Year 2004 has been included in the Board's Legislative Appropriations Request.
John Moser, Mayor of Stephenville	<p>Elements of the plan relative to the Stephenville wastewater treatment plant (WWTP) reflect long-held preconceived notions of TCEQ staff. "All our ideas, comments, suggestions and alternatives were summarily ignored. ... the Commission seems not to have heard one single word that influenced the implementation plan, including consideration of the wetlands component as an integral part." "The requirement proposed for Stephenville singles us out . . . Your bias is both glaringly obvious and unconscionable." The plan "is not based on any demonstrated scientific data that identifies the Stephenville WWTP as the significant source of excessive phosphorus." "The . . . plan references everything off the station north of Meridian . . ." and changes at the Stephenville WWTP will have no demonstrable effect at the "primary monitoring station above Meridian" although it "may make some unspecific difference immediately below Stephenville." "Research and modeling has not been done." "The plan gives no hint of concern for the financial cost to Stephenville taxpayers. It will be extraordinarily expensive, out of all proportion to its possible contribution to solving the problem." Is our community "being sacrificed for the benefit of others in the watershed with more money and political influence in Austin", or is it just because "effective steps are too difficult"? "Your proposals are unfair, inequitable and do not credibly address the significant causes of problems in the Bosque." "Your plan provides a political solution, not a scientific one." "We have exhausted all procedural, administrative and executive avenues available to us, including a direct appeal to the Governor. ... The only avenues remaining to us are legal and legislative."</p> <p>The City of Stephenville does not object to other communities on the Bosque being excluded from mandatory wastewater treatment plant actions.</p>	Upon approval of the IP, TCEQ will initiate minor amendment actions for permittees which do not currently have phosphorus limits consistent with the Phase 1 plan in order to make the permits consistent with the Phase I municipal wasteload allocation. The City of Clifton permit currently has a phosphorus limit which is consistent with (i.e. less than) the allocation; a major amendment action is necessary to change the Clifton permit to the load limit and conditions for Phase I. The Phase I Clifton permit amendment action will begin when the City of Clifton initiates a major amendment application. The initial load allocations for each city are shown in Table 4. The permits will be drafted to state that when the self-monitoring data indicates that the discharge has reached 100% of the loading rate specified in Table 4, based on the daily average for three consecutive months, the permittee shall within 90 days submit a plan to achieve compliance with the load limit on a continuous basis OR to achieve a concentration limit of 1 mg/l based on the permittee's requested design capacity flow. Upon TCEQ review of the plan, permits will be drafted to include either a phosphorus load limit on a continuous basis or a phosphorus concentration limit of 1 mg/l. This is a change in the IP, made in response to comments.

Waste Water Treatment Plants		
Sources	Comment	Response
Brazos River Authority	<p>Funds (\$1,868,274) were appropriated to the Texas Water Development Board (TWDB) to make capital improvements to reduce municipal wastewater treatment plant discharges of phosphorus in support of the TMDLs. Those funds should be allocated in the most beneficial manner to maximize the reduction of phosphorus from the collective WWTPs.</p> <p>Stephenville and Meridian are working with the Corps of Engineers to build wetlands at the outfalls of their respective WWTPs, and require non-federal matching funds. The plan should direct that any remaining unallocated TWDB funds to assist with the match requirements to complete the wetlands projects.</p>	<p>The funds in question were appropriated by the Legislature for specific purposes. Plans to use the funds as suggested by this comment should be coordinated with the TWDB. Legislative changes may be necessary to allow this funding to be used as suggested. No changes.</p>
Brazos River Authority	<p>The possibility exists for a cost share approach among the WWTPs in the North Bosque watershed. Some cities may not have to actually modify their plants, but could contribute proportionally to the annual operation and maintenance costs of the cities that upgrade WWTP facilities.</p>	<p>A cost share approach may be beneficial and/or efficient, but would require regional coordination. The IP would not prevent or prohibit cost sharing. If the BRA or the municipalities wish to lead such efforts, TCEQ will cooperate to the extent possible. No changes.</p>
Brazos River Authority	<p>Additional studies could be performed to determine the sources of phosphorus into each municipal WWTP system. After defining the unique sources for each WWTP, outreach programs could inform contributing parties of ways to reduce their input of phosphorus, as a way to reduce phosphorus discharge without changing treatment systems. As part of its leadership role, the Brazos River Authority would be willing to participate as a sponsor for this project.</p>	<p>TCEQ agrees that such efforts could assist cities in reducing phosphorus loading. Both the TMDLs and the IP specifically recognizes that there may be alternative approaches to phosphorus reduction. No changes.</p>
Larry McKinney, Texas Parks & Wildlife Dept.	<p>The Texas Parks and Wildlife Department (TPWD) urges reconsideration of the proposal to require a 1 mg/L permit limit for Stephenville only. TPWD is concerned that phosphorus discharges by the other cities may be problematic, particularly during summer months.</p>	<p>TCEQ has determined that it is appropriate in this case to take an incremental approach to reducing municipal wastewater phosphorus loading. As watershed loading is reduced overall, adverse effects that may be caused by discharges from small cities can be addressed. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
Jerry Golden, Clifton City Administrator	During one three day storm runoff event (March 2002), more phosphorus from nonpoint source runoff passed Clifton in river flow (~ 60K lbs) than would be discharged by all cities combined during a year (~ 13K to 25K lbs). All cities, including Waco, believe that phosphorus loading from the municipalities are not causing the problem in the river and Lake Waco, and would not be a problem at all relative to Lake Waco. The problem comes from upstream runoff polluted by CAFOs.	Under high flow conditions there is considerably more loading of phosphorus to the river than is contributed by municipal wastewater treatment plants in the watershed. This is substantiated by the large volume of water quality and flow data collected in this basin. However, the continuous discharge of wastewater under all flow conditions cannot be neglected as a contributor to the phosphorus loading of the river and cannot be ignored by efforts to control phosphorus loading. No changes.
Steve VandenBerge, Tx Assoc of Dairymen John Cowan, Dairy Farmers of America/TAD Willy De Jong, Tx Assoc of Dairymen	The Agricultural Producers Certification Option (APCO) program is being developed to go above and beyond what the TMDL requires. The APCO program will provide NUPs for waste application fields, CNMPs for entire farm operations, will recertify lagoons, and make each dairyman accountable for their own operation. Dairy industry looks forward to working with this program and providing a positive impact on the North Bosque River watershed. The APCO program should be an important element of the implementation plan.	TCEQ acknowledges and supports the efforts of the Texas Association of Dairymen, Dairy Farmers of America, the Texas Cooperative Extension, the Texas Institute for Applied Environmental Research, the Texas State Soil and Water Conservation Board and other agencies to implement the Agricultural Producers Certification Option for dairy operations in this watershed. Similar programs developed by the beef cattle, pork, and poultry industries are being developed and implemented in other parts of Texas and in other states. Because of the educational benefit to producers who participate in these programs, TCEQ has committed to providing continuing education credits to meet educational training requirements in 30 TAC Chapter 321, Subchapter B for operators in the Dairy Outreach Program Area. Agencies involved in developing and implementing this program are committed to making it available to other dairy operations in the state. No changes.
Steve VandenBerge, Tx Assoc of Dairymen John Cowan, Dairy Farmers of America/TAD	Dairy industry looks forward to utilizing new technologies such as the Synagro waste-to-energy project. Private/public partnerships are developing in the watershed to encourage use of emerging technologies.	TCEQ acknowledges the efforts of the Texas Association of Dairymen and Dairy Farmers of America to evaluate new waste handling and treatment technologies and to assist with the demonstration and education of their members the efficacy and applicability of these new technologies to meet environmental protection responsibilities of the operators. TCEQ is actively engaged with several projects related to pilot testing and demonstrations of alternative treatment and waste handling processes, by assisting with funding and providing technical assistance. No changes.

Subchapter B rules		
Sources	Comment	Response
John Cowan, Dairy Farmers of America/TAD	The implementation plan should allow animal wastes to be applied to farm ground at an agronomic rate on fields available to the farm operator within or outside the watershed, and consistent with the requirements of that individual farm's permit.	TCEQ strongly encourages beneficial use and re-use of waste materials in ways that enhance and protect environmental resources and promote conservation. TCEQ supports the development and implementation of practices which will achieve goals of proper waste handling, conservation, and protection of resources. Beneficial use is a waste disposal strategy specifically recognized and authorized by Subchapter B rules. These technical requirements related to land application of wastes were developed with assistance and input from agricultural specialists and are based on technical guidelines developed by the United States Department of Agriculture. They are consistent with accepted and documented agricultural and engineering practices related to land application of animal wastes. Permits for individual operations may be adjusted to meet specific requirements of each operation and to provide the necessary protection of the unique characteristics of each application site. No changes.

Subchapter B rules		
Sources	Comment	Response
<p>State Senator Kip Averitt State Representative Holt Getterman Truman Blum, citizen (former mayor Clifton) Dennis Cogliati, Mayor of Lacy Lakeview Justin Taylor, Sierra Club Lone Star Chapter State Representative Jim Dunnam Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce Louis Fleischhauer, citizen of Waco William L. Clifton, Waco Industrial Foundation Tom Ramsey, citizen of Waco Larry McKinney, Texas Parks & Wildlife Dept. Brazos River Authority</p>	<p>We are strongly concerned about the voluntary character of implementation measures for dairies. There needs to be “some accountability” to assure that dairies will take aggressive action to achieve measurable results as rapidly as possible, and so that all parties will know if what we’re doing is actually working.</p> <p>The plan should allow measures which are voluntary but clearly state the requirement for compliance. Voluntary measures without accountability are a major part of the problem. The TCEQ should reconsider and strengthen the proposals for animal-related industries which are not voluntary.</p> <p>Only voluntary measures are described for dairies – voluntary measures have never and will never work. There is no incentive for dairies to change, no disincentive for polluting. Voluntary measures for dairies are insufficient. There must be defined penalties for not meeting specific minimum standards.</p> <p>The Texas Parks and Wildlife Department (TPWD) notes that the plan focuses primarily on voluntary measures, and is concerned about what will happen if those are not successful. The plan does not provide a clear mechanism to explain how voluntary actions in Phase I will become mandatory actions in Phase II.</p> <p>Voluntary measures outlined in the plan will likely be effective in the long term, if properly performed. The Agricultural Producers Certification Option (APCO) program may help implement those measures. There must be varied and innovative incentives for participation in voluntary measures in order to assure success.</p>	<p>Although further phosphorus reductions from dairy operations in this watershed are dependent upon implementation of significant and extensive voluntary measures, the dairy industry is subject to regulatory requirements. All animal feeding operations in the watershed, regardless of size, are subject to the technical requirements of 30 TAC Chapter 321, Subchapter B. Recent revisions to the regulation in response to legislation adopted by the 77th Texas Legislature eliminate the registration process for any new or expanding dairy CAFO in this watershed. They are now required to obtain an individual permit. Also, TCEQ may not issue a general permit to authorize dairy CAFOs in the Bosque River watershed. Under the current regulations, operations which are not required to obtain individual permits must still meet the Subchapter B pollution prevention plan requirements to be compliant with state and federal law. Inspection vigilance has increased and facilities which are non-compliant are subject to administrative penalties and enforcement actions. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
State Representative Holt Getterman	<p>It's time for firm decisions, time to move forward in a positive direction to accomplish our common goals of clean, healthy water in the Bosque River and Lake Waco. I offer my office as a place for dialogue or setting priorities, and will use my position to support efforts to get these plans completed and implemented.</p> <p>All must work together to address this serious subject. At TCEQ, "you guys are not doing your job, and it is time for you to step up before you become the Texas Commission on Enviromental Quackery." We know mistakes have been made in the plan, do not be embarrassed about changing those things.</p>	<p>TCEQ appreciates the commentor's offer of help. When additional information becomes available or the efficacy of new technology is documented, TCEQ will revisit the strategies identified in the IP and determine whether to make corrections or adjustments as necessary and appropriate to achieve the water quality standard. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
<p>State Representative Jim Dunnam Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce William L. Clifton, Waco Industrial Foundation Don Baker, Mayor of Woodway and representing McLennan Community of Cities Virginia DuPuy, Waco Business League Dennis Cogliati, Mayor of Lacy Lakeview John Mabry, candidate for State Representative Clarence Fields, Goodall Witcher Hospital Foundation Toni Herbert, Waco City Council Jimi Kirkpatrick, Waco Youth Council Brendan Gibney, Waco Youth Council Wiley Stem, Waco Assistant City Manager Kay Neugebauer, citizen of Waco</p>	<p>We are very disappointed by the draft implementation plan, which indicates that the Commission and its staff intend to continue “business as usual” by failing to adequately regulate the dairy industry. The “train wreck” (TNRCC) has a “dismal record” with regard to protecting water quality in the Bosque/Lake Waco watershed, and has allowed the current “sorry state of this river and Lake Waco” to develop. This is a plan to fail, that will actually impede recent progress towards watershed partnerships and new technologies. The TCEQ has both the authority and the responsibility to regulate the dairy industry. The TCEQ is ignoring legislative directions from the sunset review process by not taking “the dairy problem in this watershed seriously.” TCEQ is attempting to avoid pain now by not pushing the dairies, but the pain will be much worse in a few years after legislation or lawsuits force drastic short-term actions, or if dairies “are hit by juries with ruinous tort damage verdicts in lawsuits”. We want a plan based on science, not politics. Plan uses weak language (“may, can, should, could”) but needs to have “assertive, demonstrative, definitive” tone. “The TCEQ has not done its job in providing a defining implementation measure that WILL occur to meet the water quality goals of the TMDL.” The plan needs to protect water quality for the health and welfare of future generations. The TCEQ should seriously consider changing the plan, so that past efforts will not all be wasted.</p>	<p>The IP is a strategic planning document which includes a description of potential regulatory and voluntary strategies to achieve the pollutant reductions identified in the TMDLs. The IP and TMDLs are designed to protect water quality in the North Bosque River watershed. They do not address Lake Waco because Lake Waco meets all criteria to support all of its designated uses. In addition, the IP is a living document that allows for adjustments to the strategies identified if initial efforts to reduce phosphorus loadings are not successful. Consequently, if new scientific data becomes available beyond the data upon which the TMDLs and IP were predicated, the IP can incorporate strategies based on such new data. TCEQ recognized that there may be approaches to address impairment other than those proposed in the IP and has solicited input and alternative solutions in the draft. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
State Representative Jim Dunnam Carson Hoge, Waco Chamber of Commerce	Measures described in the draft plan for consideration when Chapter 321 Subchapter B rules are reauthorized in 2004 should be implemented immediately. Those measures include: requiring all Animal Feeding Operations to use Comprehensive Nutrient Management Plans, requiring tailwater controls at waste application sites, requiring recertification of Runoff Control Structures if chronic-condition discharges occur, revising definitions of chronic and catastrophic rainfall event, and revising design criteria for Runoff Control Structures. "If the Commission would adopt just a couple of these measures with the requirement to haul off or capture and treat collectible manure and back it all up with rigorous enforcement, the stream water quality within all stretches of the North Bosque River would be dramatically improved."	TCEQ is committed to completion and approval of the IP. Once the IP is approved by TCEQ, processes to see that IP recommendations are implemented will begin. TCEQ will initiate an analysis of the correlation between the occurrence of "chronic" rainfall events and overflows from lagoons and waste storage ponds. Results will be used to determine what revisions to the CAFO regulations are warranted. TCEQ will also initiate 30 TAC Chapter 321, Subchapter B rulemaking in the Spring of 2003. The revision to Subchapter B may include clarifying distinctions between "chronic" and "catastrophic" rainfall events, and/or eliminating the "chronic" rainfall event exemption. These are changes in the IP, made in response to comments.
State Representative Jim Dunnam	"At this point, the necessary additional controls can be phased in as CAFO permits come up for renewal, and on compliance schedules that make them affordable."	TCEQ will consider development of phased-in compliance schedules as permits are renewed and as the APCO program is implemented. No changes.
W. Leon Smith, Mayor of Clifton David Anderson, Clifton City Council Tom Ramsey, citizen of Waco	The plan lacks any means of addressing runoff after heavy rainfall events. City discharges during low flow are well within the assimilative capacity of the river, but nonpoint storm runoff overwhelms the river with phosphorus. Water quality in the North Bosque River is fine under low flow conditions, only becomes high in phosphorus during runoff events, which then leave residual phosphorus up and down the riverbed.	TCEQ is committed to implementing a combination of regulatory and voluntary activities which will lead to improvement of water quality and future protection of the resource. No changes.

Subchapter B rules		
Sources	Comment	Response
<p>W. Leon Smith, Mayor of Clifton Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Wiley Stem, Waco Assistant City Manager Carson Hoge, Waco Chamber of Commerce William L. Clifton, Waco Industrial Foundation</p>	<p>The state should utilize its “vast resources” to assist in the design and reconstruction of CAFO lagoons. The lagoons/runoff control structures are known to overflow, and are significant sources of loading. Increasing lagoon capacity alone could have a major impact on water quality.</p> <p>It is critical that TCEQ eliminate “the chronic water runoff exemption in permits.” Failing to do so “is just going to kill the plan because that is what’s killing Lake Waco.”</p>	<p>TCEQ will initiate an analysis of the correlation between the occurrence of “chronic” rainfall events and overflows from lagoons and waste storage ponds. Results will be used to determine what revisions to the CAFO regulations are warranted. TCEQ will also initiate the rulemaking process to revise Subchapter B in the Spring of 2003 which may include clarifying distinctions between “chronic” and “catastrophic” rainfall events, and/or eliminating the “chronic” rainfall event exemption. These are changes in the IP, made in response to comments.</p> <p>Additionally, TCEQ has committed in the IP to evaluate the exemption related to chronic rainfall events by considering more prescriptive management practices in permits and by expanding the enforcement efforts to reduce unpermitted overflows from the lagoons. The APCO program and the microwatershed evaluation process to be implemented with the assistance of the TSSWCB will include an evaluation of the adequacy of the existing lagoons and management practices. Funding assistance available under the 2002 Farm Bill may be available to the producers to make necessary changes to meet environmental protection requirements. No change.</p>
<p>David Anderson, Clifton City Council Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Brown/McCarroll LLP for City of Waco</p>	<p>Measures that could be implemented to control or mitigate storm runoff loading were suggested to TCEQ by the City of Waco and the North Bosque Coalition of Mayors, but were ignored or not included in the draft plan.</p> <p>The City of Waco asks the TCEQ to consider the proposed implementation plan that the City previously submitted.</p>	<p>Most of the measures suggested by the City of Waco are included in the IP. Many of the remaining suggestions relate to the kinds and timing of additional controls applicable to dairies. If the strategies incorporated in the IP are not successful, in sufficiently reducing phosphorus loading, the remaining suggestions maybe reevaluated at that time in consideration of alternative strategies. No change.</p>

Subchapter B rules		
Sources	Comment	Response
<p>Wiley Stem, Waco Assistant City Manager Louis Fleischhauer, citizen of Waco John Mabry, candidate for State Representative Dennis Cogliati, Mayor of Lacy Lakeview Tom Ramsey, citizen of Waco Justin Taylor, Sierra Club Lone Star Chapter</p>	<p>The TCEQ should not continue permitting new or expanded CAFOs. There should be absolutely no new loading allowed in this impaired watershed. The no-discharge permits actually allow discharges from runoff control structures under catastrophic or chronic rainfall conditions. “You need to stop permitting new facilities, new cow numbers in the watershed until you clean the river up.”</p>	<p>Current regulations for this watershed require individual permits for new and expanding dairy operations. As part of the technical documentation required to issue such permits, TCEQ works with specialists and experts in waste control areas to incorporate regulatory requirements which will prevent further degradation of the water quality. TCEQ must also meet requirements of the state and federal regulations which apply to impaired watersheds as described in the Clean Water Act. TCEQ will evaluate overflows from lagoons under chronic and catastrophic rainfall conditions. No changes.</p>
<p>Wiley Stem, Waco Assistant City Manager</p>	<p>It should be mandatory that every dairy “have retention utilization plans and certified nutrient plans.”</p>	<p>The IP describes a process by which the TSSWCB will lead the development of comprehensive nutrient management plans for all facilities in the watershed (permitted, non-permitted, and other non-dairy areas) that use animal waste for soil amendment and fertilizer. TCEQ has committed to a review of applicable sections of 30 TAC Chapter 321, Subchapter B rules to evaluate the need for this requirement. No changes.</p>
<p>Wiley Stem, Waco Assistant City Manager</p>	<p>There needs to be no application of any waste, liquid or solid, to any fields that have above 200 parts per million phosphorus in them.</p>	<p>TCEQ continues to work with soil specialists and other agencies to refine procedures related to management of land application areas. The United States Department of Agriculture Natural Resources Conservation Service has developed technical guidelines which provide a technical basis for the development of comprehensive nutrient management plans. These technical guidelines include the application of a “phosphorus index” to develop nutrient management plans which are very specific for any individual land application area and take into consideration the variability of such areas, such as phosphorus levels, soil type, slope, and other factors. TCEQ will continue to track research in the area of waste management and soil science to ensure any adjustments to regulations are technically valid. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
<p>Ricky Garrett, Utility Director City of Waco</p> <p>Annette Jones, Assistant City Attorney Waco</p>	<p>When cities experience spills of waste, they must notify TCEQ, send crews to remove waste and disinfect, notify downstream landowners and news media, prepare reports about causes and consequences, etc. When CAFOs spill waste from lagoon overflows, they only have to notify TCEQ, nothing else. Where is the equity in that, where is the protection for those downstream?</p> <p>A family of four installing an aerobic septic tank system generating about 300 gallons of wastewater per day must deal with stricter regulations than a CAFO does. Where is the equity in that? Why shouldn't the dairies be required to treat and disinfect its waste, just like an on-site facility or domestic wastewater treatment plant? The rules and regulations of TCEQ have set up a double standard – when dealing with human waste there is one standard, but another “looser” standard for dealing with animal waste.</p>	<p>Wastewater may only be discharged from a CAFO when rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility properly designed, constructed, and operated to contain process generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event. Additionally, CAFO operators are required to report overflows from retention basins and, where it is safe to do so, to collect samples of the overflow water for analysis. TCEQ will consider expanding the notification requirements. No changes.</p>
<p>Brown/McCarroll LLP for City of Waco</p>	<p>The draft plan, if adopted, would be arbitrary, capricious, and an abuse of the TCEQ's authority because there is no reasonable possibility that the 50% reduction in phosphorus concentrations and loading can be attained by this plan. The central reason for this inadequacy is that only voluntary measures are proposed for CAFOs even though CAFOs are responsible for 80% of the controllable phosphorus loadings into the river. The only measures mentioned that may work are only to be considered in 2004 when Subchapter B is up for readoption. TCEQ would be acting arbitrarily and capriciously if it fails to adopt these measures now as part of the implementation plan.</p>	<p>The IP is a living document that may be changed to effect additional strategies if those proposed in Phase I are not successful in sufficiently reducing phosphorus loadings. The plan's goal is to effectively reduce phosphorus loading and long-term phosphorus concentrations and potentially other pollutants as well. TCEQ encourages voluntary efforts by agricultural operators; mandatory requirements or rule changes may be necessary if voluntary efforts are not adequate. TCEQ is committed to implementing a combination of regulatory and voluntary activities which will lead to improvement of water quality and future protection of the resource. No changes.</p>
<p>Brazos River Authority</p>	<p>The Brazos River Authority agrees that clarification regarding chronic and catastrophic rainfall conditions and discharges from runoff control structures is needed, with the intent of eliminating inappropriate discharges.</p>	<p>TCEQ appreciates support in this effort and will welcome specific suggestions for ways to accomplish this. No changes.</p>

Subchapter B rules		
Sources	Comment	Response
Brazos River Authority	<p>The Brazos River Authority recommends some changes to AFO/CAFO regulation that will prescribe or encourage certain activities:</p> <ul style="list-style-type: none"> – Maintain a web-site list of all current AFOs and CAFOs in the North Bosque watershed, with information about whether each has implemented a NUP, CNMP, or WQMP, and facility location. – Require detailed reports on animal waste management at the dairies. – Establish criteria that will determine when the TSSWCB will refer an operation to TCEQ for noncompliance with its CNMP or WQMP. Establish streamlined TCEQ enforcement worksheets for dairies referred from TSSWCB so enforcement actions are quick and do not create a processing bottleneck. – Set up requirements similar to the Title V Air Permit Program, to increase personal liability, self-monitoring and reporting by dairies, and to establish compliance investigation protocols that allow better focus on runoff controls and rainfall-driven discharges. 	<p>TCEQ has committed in the IP to initiate the rulemaking process to revise the current CAFO regulations in the Spring of 2003. TCEQ will provide opportunity for recommendations for rule revisions. This is a change in the IP, made in response to comments.</p> <p>Under TCEQ rules related to compliance history the agency is required to include information similar to that requested for all permitted facilities in the state. Current regulations require each permitted facility to maintain records on site as well as submit reports on a regular basis related to waste management at the facility. Criteria for referral of noncompliant facilities can be found in the Memorandum of Understanding between TCEQ and the TSSWCB. Any review of the existing rules related to CAFOs and, in particular, dairies in this watershed will include a review to determine consistency with the Memorandum of Understanding. No changes.</p>

Agricultural Permit Review		
Sources	Comment	Response
Willy De Jong, Tx Assoc of Dairymen	The Texas Association of Dairymen (TAD) supports revised permitting procedures that will facilitate timely construction of improvements to confined animal feeding operations (CAFOs). Conscientious implementation of Phase I measures will likely result in the need to modify existing facility operations, such as enlarging runoff control structures or increasing waste application field acreage, and expedited authorization for those types of activity will encourage such efforts.	TCEQ will continue its effort to develop and improve the permitting process to provide technically sound permits which provide the needed protection of water resources. TCEQ supports the efforts of the Texas Association of Dairymen and other organizations and agencies in their efforts to conduct self-evaluations of environmental controls and to make changes and improvements necessary to improve the effectiveness of the controls. Some amendments to existing permits and authorizations may be necessary to reflect improvements in waste management procedures that result from the evaluations. TCEQ recently adopted new rules which implement statutory requirements to evaluate compliance history and to encourage development and implementation of environmental management systems. TCEQ is actively pursuing ways to expedite the permitting process while being attendant to legal and public participation requirements. No changes.
Willy De Jong, Tx Assoc of Dairymen	The Texas Association of Dairymen (TAD) recommends that the plan adopt expedited permitting procedures for renewals or expansions of existing permitted facilities where the producers have implemented NUPs and CNMPs that will reduce nutrient discharge from the facilities.	TCEQ will continue to work with the permitting procedures to improve the permitting process. No changes.

Enforcement activities		
Sources	Comment	Response
Paul Holroyd, Director of Community Services City of Hewitt	There needs to be “adequate enforcement on the CAFO operations to see that they comply with good practices.” Dairy operators should be held to the same standards that municipal operators are, required to have schooling and certification by TCEQ.	Enforcement action on any entity is subject to statutory requirements as well as established agency protocols for enforcement actions. When violations at a CAFO facility are documented, every effort is made to ensure that the necessary corrective actions occur so the facility comes into compliance.
William L. Clifton, Waco Industrial Foundation	“Why doesn’t the plan talk about new enforcement activities or new remediation plans?”	The IP has been developed as a living document allowing a phased approach to achieving reductions in phosphorus loadings. If initial efforts to reduce phosphorus loadings are not successful, additional strategies may be incorporated as part of Phase II implementation.
Virginia DuPuy, Waco Business League	The “may” and “should” for dairies should become “must,” with deadlines for compliance. Unless requirements are mandatory for all dairies, those dairies that are already doing what they “should” are placed at a competitive disadvantage, so strict enforcement is only fair to dairy operators. Failure to enforce regulations also has the net effect of pitting upstream and downstream citizens against each other.	Certification requirements for agricultural operators are established by law, and changes may require legislative approval. The Agricultural Producers Certification Option (APCO) program may provide opportunities for dairy operators to voluntarily acquire certification of their knowledge, plans, and operation. No changes.
Jeff Heinz, citizen of Waco	The solution is easy – the dairy industry needs to manage its waste. Other industries are not allowed to operate that way. “Where are the teeth of the TCEQ when it comes to these dairy farms? This agency needs to do its job and quit worrying about the political ramifications of hurting an industry that is in gross negligence.”	
Justin Taylor, Sierra Club Lone Star Chapter	On the eve of the 30 th anniversary of the Clean Water Act, “it is very unfortunate that the TCEQ has taken a big step backward in their duty to protect the waters of our state with this implementation plan for the Bosque River.” It is obvious to many that the plan will not succeed. “The most obvious flaw with this plan is the lack of new measurable of enforceable requirements set on the dairy industry in the watershed.” Something must be done to ensure that the dairy industry upholds its responsibility to its downstream neighbors and to the environment.	The IP includes a commitment to more vigilance on the part of regional inspectors to verify all requirements for the protection of water quality. Once the IP has been approved, continued improvements to water quality should be realized. The IP is crafted to allow modifications and changes that may be needed if the goals are not being achieved. No changes.

Enforcement activities		
Sources	Comment	Response
Annette Jones, Assistant City Attorney Waco	To assure adequate regulation of on-site sewage facilities (OSSFs), state law allows TCEQ to designate a local government entity to enforce the regulations. Perhaps TCEQ should seek similar legislation to deal with inspection of dairy operations.	Delegation of authority to act as an Authorized Agent of TCEQ would require a legislative change in the governing statutes. Neither TCEQ nor TSSWCB have the authority to delegate such responsibility. Consequently, TCEQ and TSSWCB will retain primary responsibility for administration and oversight of implementation activities, and TCEQ will remain the legal authority for enforcing implementation needs. No changes.
Larry McKinney, Texas Parks & Wildlife Dept.	The Texas Parks and Wildlife Department (TPWD) encourages TCEQ to put more money and resources into compliance and enforcement activities in the North Bosque River watershed. An active compliance program will help identify problems in the early stages and facilitate all participants in finding solutions without the use of enforcement.	TCEQ has focused significant resources on monitoring, assessing, and understanding nutrient loading issues associated with the North Bosque River, including inspections, compliance assistance, and enforcement. This has included establishment of the Stephenville Special Project Office to focus on CAFO-related compliance and enforcement issues in the region. No changes.

Water Quality Monitoring		
Sources	Comment	Response
Ron Jones, TIAER Darren Turley, TFB W. L. Nix, citizen of Stephenville	Extensive monitoring of N Bosque to date cannot tell whether there is currently a trend upwards or downwards in river concentrations of phosphorus. However, we can say for sure that loading from the dairy industry is not increasing in the N Bosque River. The results of many improvements by dairies since 1998 may not be reflected in the draft plan. To account for that, additional data gathering should be undertaken, analyzed, and reported.	TCEQ has committed in the IP to additional environmental monitoring to clarify such issues and to guide potential future strategies. There will also be programmatic monitoring to assess the level of effort put forth to achieve environmental results. No changes.

Water Quality Monitoring		
Sources	Comment	Response
William L. Clifton, Waco Industrial Foundation	Monitoring schedule is too slow. Full monitoring program should be in place earlier than 2006. Method described for assessing progress at index sites “is much too loose” and “allows way too much latitude.” Plan “wants to wait for years before success or failure is determined.”	Extensive water quality monitoring already occurs in the North Bosque watershed. Increased monitoring requires time and resources to initiate. Success of implementation efforts will be determined by long-term trends, due to the size of the watershed and distribution of sources in time and space, and trends cannot be measured instantly. TCEQ will incorporate another success evaluation technique, suggested in a comment regarding the IP, that will compare future monitoring to historical data as well as model predictions.
Addis T. McNamara, citizen of Waco	Tributary streams or subwatersheds could be evaluated for attainment / nonattainment, similar to the Clean Air Act, so that new rules or funding can be applied in an efficient and equitable way to reach the solution we need.	TCEQ’s current water quality assessment practices do assess tributaries independently when possible. The IP for the North Bosque watershed includes extensive monitoring of tributaries at subwatershed and microwatershed scales, for the purpose suggested. Tributary and subwatershed data will be used to focus further efforts on problematic areas, as well as to demonstrate progress, so that adaptive efforts can be efficiently and equitably focused on the appropriate areas. No changes.
Larry Hauck, TIAER	The Texas Institute for Applied Environmental Research (TIAER) agrees that a strong monitoring plan is crucial to determining the success of TMDL implementation. TIAER agrees that monitoring at the index sites should occur at a minimum of once per two weeks, and more often if possible, and agrees that flow measurement at the index sites should be considered in the monitoring plan. However, TIAER would emphasize that continuous streamflow measurements at the index sites is very important, and that it is imperative that storm runoff flows be measured and monitored.	TCEQ agrees that flow measurements to accompany water quality data are important, and detailed future monitoring plans will incorporate flow measurements at each station and sampling event as possible and feasible. No change to the basic plan.

Water Quality Monitoring		
Sources	Comment	Response
Larry Hauck, TIAER	The Texas Institute for Applied Environmental Research (TIAER) advises extreme caution by TCEQ when using TMDL SWAT model results as the post-implementation standard – such use is directly limited by the accuracy of model predictions. TIAER suggests that TCEQ consider also using regression analyses of historical data from the index sites as additional means for assessing implementation progress. Example regressions of annual flow versus annual concentration and/or loading performed by TIAER show promise for this type of use.	The additional method suggested for evaluating progress has merit and TCEQ has incorporated it into the IP.

Phase II		
Sources	Comment	Response
W. Leon Smith, Mayor of Clifton	Other types of measures not included in the draft plan may be needed. Suggestions include: upstream wetlands; dams and/or onstream waste treatment plants on impaired tributaries in the dairy region; state aid to dairies using surplus equipment manned by inmate labor.	The IP provides flexibility to include other actions not specifically listed which may contribute to phosphorus reduction in the river and make progress toward the goals of the TMDLs. TCEQ is actively involved with a number of other agencies to evaluate the efficacy of some of these suggestions and welcomes the participation of any and all agencies and cities that might contribute to efforts to alleviate current problems and provide future protection of this resource. No changes.

Refinement of Watershed Model		
Sources	Comment	Response
John Cowan, Dairy Farmers of America/TAD Willy De Jong, Tx Assoc of Dairymen	Great care should be used when assessing monitored data to evaluate progress of the implementation plan, due to uncertainty regarding past data and modeling analyses. The models upon which the TMDLs are based should be calibrated based on all criteria for potential point and non-point sources of nutrients.	TCEQ will use all available relevant data and information when evaluating progress. In addition, the IP includes a major effort to refine and improve the model analyses upon which the TMDLs are based, with appropriate adaptation of implementation efforts based on analyses using the refined model. No changes.

Refinement of Watershed Model		
Sources	Comment	Response
<p>Linda Ethridge, Mayor of Waco Randy Riggs, mayor pro tem of Waco Carson Hoge, Waco Chamber of Commerce</p>	<p>The modeling used to develop the TMDL did not include runoff from lagoons. It also assumed that waste application fields were in compliance with the 200 parts per million of phosphorus rule. Those issues need to be addressed somehow, “because you didn’t model them.”</p>	<p>The TMDLs include loadings due to lagoon discharges. As stated on page 6 of the IP, “All loadings that emanated from any aspect of a dairy operation during the monitored period were addressed in the analyses as WAFs...” Therefore, loadings from lagoon dischargers due to chronic or catastrophic rainfall events as authorized in permits and registrations are included in the loadings. Unauthorized discharges from WAFs are and will continue to be addressed through enforcement. No load allocation was made for illegal discharges from either point or non-point sources. TCEQ has committed to a rigorous monitoring program to gather additional data for use in refining the model and expanding the use of predictive models to support any additional actions that need to be implemented to protect this resource. No changes.</p>
<p>Richard Howard, Lab Supervisor City of Waco</p> <p>W. L. Nix, citizen of Stephenville</p>	<p>The TMDL stated that water quality is highly variable, but the SWAT model used for it “assumes an average load.” “It’s illogical to assume averages when you have periodic problems, not average problems.” The model should be calibrated or corrected to “fit the actual circumstances that we’re seeing in the North Bosque River.” Commentor fears the modeling did not adequately blame the dairies.</p> <p>This is a very “complex situation with many variables,” difficult to model well. Is the model adequate when the stakes are high? Data, analyses, and modeling may need peer review. Commentor fears the modeling may have unfairly blamed the dairies.</p>	<p>The IP includes a commitment to extensively refine and improve the model analyses of the North Bosque watershed, followed by appropriate adaptation of the IP. No changes.</p>

Effluent Trading		
Sources	Comment	Response
<p>John Cowan, Dairy Farmers of America/TAD</p> <p>Brazos River Authority</p>	<p>The TCEQ should consider a nutrient trading program as one means to achieve nutrient reduction goals while reducing the need for/cost of upgrades to city wastewater treatment systems.</p> <p>The plan should take advantage of opportunities for nutrient trading among dairy producers within microwatersheds that have a certain level of participation in innovative capture and treat technologies for dairy waste.</p>	<p>The IP recognizes that an effluent trading program for phosphorus may become feasible in the North Bosque watershed and that TCEQ will encourage and support efforts to establish and operate a suitable trading program. No changes.</p>