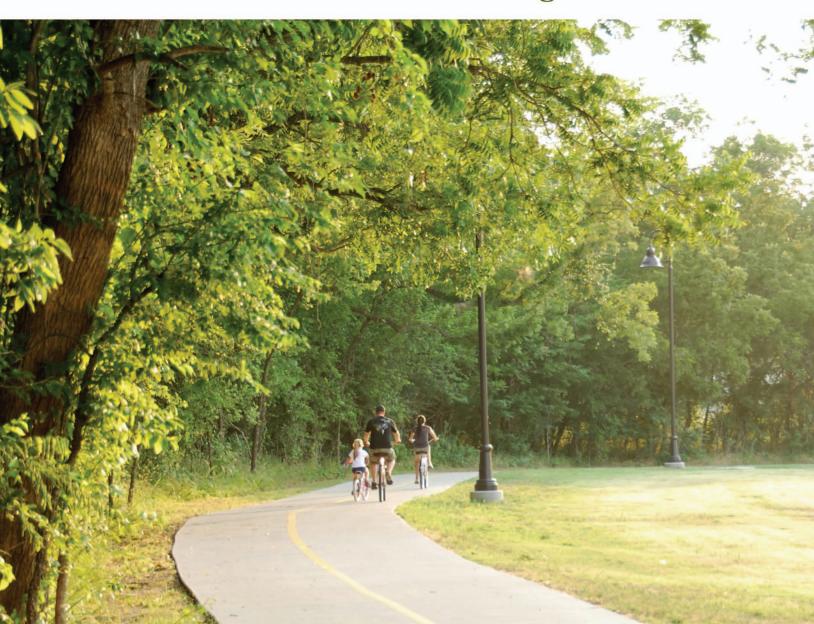


# **STRATEGIC PLAN**

Nature is Our Heritage











# Why this plan?

The Bosque River Trail Corridor Strategic Plan represents the talents and opinions of a number of partnering organizations and citizens of Stephenville and Erath County collected over a nearly two-year period. Participants envisioned that the Bosque River could "be a model river and trail corridor focused on health and recreation, education, transportation, and restoration, all celebrating the heritage of our region." In the pages that follow, the reader will find information useful for the realization of this vision through collaborative efforts of the City of Stephenville, Erath County, Keep Stephenville Beautiful, and the many advocates for the river and the trail.







## **Key Participants**

Brazos River Authority
City of Stephenville
Erath County
Keep Stephenville Beautiful
National Park Service
Stephenville Independent School District
Tarleton State University
Texas AgriLife Research & Extension Service
Stephenville Chamber of Commerce
Stephenville Economic Development Foundation
Stephenville Historical House Museum
Stephenville School Board
Stephenville Soccer Association

# Chapter 1



# The Bosque River Trail Corridor



# The Project, Vision and Mission

The Bosque River Trail Corridor ("BRTC") is a proposed river trail system along eight miles of the Bosque River in and around the City of Stephenville, Texas. This BRTC will be a model river and trail corridor focused on health and recreation, education, transportation and restoration, all celebrating the natural heritage of the region. Located in the heart of the Cross Timbers region of Texas, Stephenville is known as the "Cowboy Capital of the World" and is the seat of Erath County. The community is home to Tarleton State University, a scholastic and sports team championship high school, and a local dairy industry that leads the State of Texas in annual milk production. Ultimately, the BRTC will provide and promote stewardship of the community waterway to preserve natural heritage, promote healthy lifestyles, and provide educational opportunities for current and future generations.

As late as the 1970s, the Bosque River played a starring role in the lives of Erath County residents. They swam in its pools, fished its waters, and watered their cattle on its banks. Within a few short years, however, as phosphorous levels rose in the Bosque's tributaries, the river began to see visible signs of pollution. By 1998, segments of the North Bosque River were deemed "impaired segments" on the Clean Water Act listing. Since then, reclamation and compliance efforts have helped improve and sustain Bosque waters quality within the watershed basin. The Bosque River Trail Corridor Project will tell the story of how a region is working to successfully recover an "impaired" waterway, while providing recreation and educational opportunities to local residents, university students, and visitors to the area



4th of July FunFair on the Bosque River in City Park, circa 1970s Photo credit: Stephenville Historical House Museum

The BRTC will complement and enhance Stephenville's existing one-and-a-half mile trail, known as the Bosque River Trail. When combined with this existing trail, the new (proposed) BRTC trail will link the city's two major parks. Beginning at the northern border near the Optimist Jaycee Park, the BRTC will wind in a slow "S-curve." It will offer linkages to Tarleton State University's Agricultural Center, the Stephenville Historical House Museum complex, and the downtown business district. It continues through the main City Park, and exits the city limits approximately two miles south. The BRTC's southern border is a proposed wetlands area near the city wastewater treatment facility.

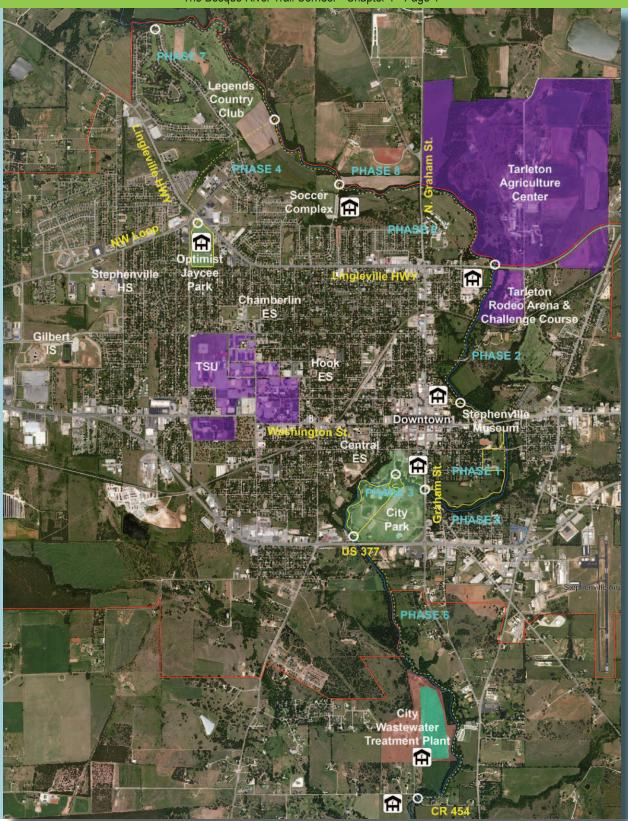
# Vision:

A model river and trail corridor focused on health and recreation, education, transportation, and restoration, all celebrating the natural heritage of our region.



# Mission:

The Bosque
River Trail
Corridor provides
stewardship of
our community
waterway to
preserve our
natural and
cultural heritage,
promote healthy
lifestyles, and
provide educational
opportunities for
current and future
generations.



#### Legend

Stephenville Schools

Existing Trail
--- Proposed Trail

Trail Head

Phase End Point

─ Railroad

— North Bosque River

Proposed Wetland

City Limits City Parks

TSU Property

Wastewater Treatment Facility

BRTC Project Area Map



The proposed trail will be interpretive, highlighting the area's indigenous natural resources and historical heritage through the installation of educational signage. It will become a living laboratory providing recreational and educational opportunities to local residents, university students and visitors to the area, and narrating through signage the story of how a region is working to successfully recover an impaired waterway. In 2011, Erath County and the City of Stephenville, working with Keep Stephenville Beautiful, revived one mile of the river, eliminating dump sites, tree debris, and trash. This historic effort not only restored a section of the river, it illustrates the spirit of cooperation and community commitment to complete the proposed BRTC. Taken together, the BRTC will highlight the greater Stephenville community's efforts to restore the North Bosque River Watershed, and serve as a model for river reclamation and restoration in the State of Texas.

# The Existing Bosque River Trail

The Bosque River Trail is a walking, hiking and biking trail that runs along the north bank of the Bosque River in Stephenville. Two riverside trails exist today: (1) inside the City Park the trail is eight-tenths of a mile along the river, 6 feet wide, and asphalt-surfaced; (2) a ten-foot wide concrete-surfaced trail begins at the edge of the City Park and continues east for a mile-and-a-half along the Bosque River. River views are available along the route through both open and wooded areas. Grassy areas with native plants and Live Oak trees, some more than 100 years old, greet trail users on the trail. A 40-foot bridge over a side tributary invites users to pause, view nature and glimpse wildlife.





Existing trail along the Bosque River

Amenities provided along the trail include two gazebos, bike storage, benches, lighting, litter receptacles, signs and mile markers. A small parking area is located at the end of Beach Street and parking is available inside City Park. The Bosque River trail connects the City Park, Boy Scout area and Stephenville Historical Museum to the downtown area. Vantage points along the trail include a space that runs behind



The current Bosque River Trail attracts appeals to families.

The Bosque River Trail Corridor - Chapter 1 - Page 6

the Historical Museum. It features a lookout structure with river views. Multiple displays of realistic animal tracks have been sandblasted into the trail, reminding the user of the native animals who live along the trail. The wildlife includes turkeys, opossum, raccoons, armadillos, birds and even deer along the trail.

The Bosque River Trail provides trail users with an experience of a beautiful part of the "country" within city limits. This country feel is rare to find this close to a populated and growing urban area.

#### Location

While the shorter segment of trail is found inside City Park, the linear segment of trail constructed in a city-owned greenway along the river is the genesis of the name Bosque River Trail (BRTC). The BRTC begins on the east side of the Graham Street Bridge, just east of Stephenville City Park on the north side of the Bosque River. From there, trail users travel east along the river until the trail curves north. At one point the trail diverges from its riverside location, following East Crow Street, South Minter Avenue, and East Long Street. The trail returns to the



BRT provides a country experience through the woods. Photo credit: Plan-it ink, Treva Wygle

river's edge on the west bank until the spot where it currently ends, at East Tarleton Street and Vine. Its location gives users close access to hotels, restaurants, and shopping, as well as to important historical sites within the City including the Historical Museum.

#### **About the Development**

Almost three decades ago the idea of a nature trail was incorporated into the City's park plans, and the trail inside City Park was constructed in 1977 with federal Land and Water Conservation Funds. The Bosque River Trail, by that name (Phase I), came to fruition October 28, 2010 and was made possible by grants from the Texas Department of Transportation – Statewide Transportation Enhancement Program, the National Transportation Equity Act for the 21st Century and the City of Stephenville. The City's matching contribution was \$443,000 (20% of the cost) for this \$2.2 million dollar project. The project engineering and design firm was Schrickel, Rollins and Associates out of Arlington, Texas. Local contractor, Jay Mills Contracting, was awarded the bid for the work on the project.

# History of the River

If Texas was the dry and dusty place imagined by Hollywood movies, it would have a hard time sustaining today's nearly 27 million people. In the mid-1850s, when Stephenville was being founded in the land named "el bosque" (the forest) by its Spanish predecessors, Texas' population numbered fewer than 250,000. As with most Texas towns, a river determined Stephenville's location. The river not only shaped the topography of the community with its banks cutting a slow S-curve path through the city; it helped define a place that is today uniquely Texan – friendly, hardworking, and educated. The intertwined history of the river and community create a rich natural heritage. The Bosque River Trail Corridor (BRTC) project is designed to continue and enhance the Bosque River's integral role for current and future generations.



New Eden by Kay Walton depicts the 1850's arrival of Erath and Stephen on the banks of the Bosque River, and Anadarko Chief Jose. From the collection of Jenny and Scott Allen.

**Erath County Courthouse** 

Home to the Caddo and Anadarko Indians, these tribes were friendly to the thirty settlers who arrived in 1855 with John M. Stephen,<sup>1</sup> the man for whom the city is named, and George B. Erath, the county's namesake. The topsoil was chocolate black loam; fields of native blue stem grasses offered ample grazing for livestock.<sup>2</sup> Abundant Post Oak trees supplied wood for log cabin structures. Ample, clean water was a necessity, and the town's original settlers chose land adjacent to the Bosque River as their oasis

One of the settlers' first acts was to map their community on a rise at the highest point above the Bosque River, the current site of the Erath County Courthouse and Stephenville's historic town square. Even from high ground it was precarious to live in Erath County until late in the nineteenth

century. For several years after the original settlers arrived, the Caddo and Anadarko were peaceful, but after two incidents<sup>3</sup> that resulted in the deaths of friendly Indians, the Comanche launched raids on the Stephenville settlement, stealing cattle and horses. Sustaining farms and ranches in Erath County was so difficult that by the early 1870s, the population had begun to decline. Within a few years, though, cotton supplanted cattle as the cash crop, and the population of Erath County swelled. For the next forty years cotton was Erath County's economic mainstay.

The strength of the late nineteenth century economy is evident in the limestone buildings on the town square. Many of the historic buildings date to the 1890s, the same time that John Tarleton College (now Tarleton State University) was founded. Famed architect, J. Riely Gordon, left his mark on Stephenville and Erath County, as he designed the courthouse and two commercial buildings on the square.



Dairy cows are part of Stephenville's history. Photo credit: Stephenville Historical House Museum

In the 1930s, declining cotton prices drove farmers to diversify. Some planted peanuts or nurseries; others raised poultry and ran dairies. It was the shift to dairies that foretold the future of the Bosque River. By the 1970s, Erath County was home to more than 15,000 dairy cattle that produced over 150 million pounds of milk and set the roots for the town's mantle, the "Dairy Capital of Texas." The dairy industry grew throughout the 1980s and early 1990s and at its peak, about one dairy a month was being added to the county. By 1990, Stephenville's

population had grown to 13,000. Population growth brought new developments with more roadways and parking lots, which added to urban runoff. Municipal wastewater treatment plants and other discharge sources contributed to downstream pollution, as did dairy waste management practices.

In 1998, parts of the North Bosque River were deemed "impaired waterbodies" on the State of Texas' impaired waters list under Sec. 303(d) of the Clean Water Act. Small freshwater creeks feed the Bosque, which has its headwaters just north of today's city limits, and these too have been impaired. A muddy-bottom river, the Bosque looks undrinkable, but for livestock and wildlife, it is a life source. In this Cross Timbers part of Texas, seasons arrive with intensity as icy winters give way to unforgiving summers. Thirty inches of rainfall comes throughout the year, but it is soaking rains that refresh the Bosque for which prayers are offered in area churches. From Stephenville, the North Bosque flows south, merging with other branches of the river to become the Brazos, eventually emptying into Lake Waco, the water supply for the City of Waco.

Over the last fifteen years as a consequence of its impaired status, the Bosque River has received more environmental, regulatory, and political scrutiny than most rivers in the United States. As in the old Hollywood westerns, help is on the way. Numerous regulations, rules and practices have been instituted to improve and sustain water quality within the watershed basin. The design of the 20-acre wetland area has been completed by the U.S. Army Corps of Engineers, Ft. Worth District; it could contribute to water quality downstream and lay the foundation for a plan for action. Dairy producers in the Bosque watershed are working to implement environmental waste solutions to benefit the North Bosque River. Today, a collaborative effort including city, county, high school, university, the agricultural and

manufacturing industries, and non-profit organizations have focused on the river corridor's current and future use.

Stephenville's roots are in the muddy bottom of the Bosque and the BRTC will tell the story of how a region is working to successfully recover an "impaired" waterway, while providing recreation and educational opportunities for local residents, university students, and visitors to the area. The site along the Bosque where Stephenville is now located served as a catalyst for settlement up the Bosque River and into the Texas Cross Timbers region. The Bosque River Trail Corridor Project will allow the "el bosque" area to once again serve as an inspiration, this time as a model for other communities on how to improve natural resources and enhance outdoor recreation. More than a walking trail in a Texas town, the BRTC is a plan for reclamation and restoration. It will connect its population and visitors to the value of the waterways throughout Texas and the nation.



Tarleton students monitor water quality in the Bosque. Photo credit: Kyle McGregor



The Bosque River at the City Park. Photo Credit: Plan-it ink, Treva Wygle

#### REFERENCES

<sup>&</sup>lt;sup>1</sup> Stephen acquired the land grant to acreage along the Bosque River in 1853 from the heirs of John Blair, killed at the Alamo. Included in the group of original settlers was William Franklin Stephen, John M. Stephen's brother, and together they ran the town's first general store. Early in the history of the city it was referred to as "Stephensville" as well as "Stephenville."

<sup>&</sup>lt;sup>2</sup> As late as 1870, buffalos grazed within three miles of the town.

<sup>&</sup>lt;sup>3</sup> The first incident, in 1858, resulted in the slaughter of seven Indians and one settler when a band of self-appointed Erath County Rangers attacked the Caddo and Anadarko. The second incident was about 1860 when Red Jack, an Anadarko, was killed at the hands of a settler. Red Jack is reputed to be buried along the Bosque near the Tarleton Farm; the BRTC will be near this site. See Sherrod, Ricky M., Stephenville. Arcadia Publishing, 2010. pp. 14-15; Young, Dan. Interview with M. Dunkerley, January 8, 2014.

Chapter 2



# **Goals and Strategies**



The Bosque River Trail Corridor is a multi-faceted vision. The BRTC Advisory Committee offers the following four major goals with more detailed strategies to implement the goals. Some of the recommended strategies are already underway while others will follow in the future through the efforts of the City of Stephenville and its partners.

## **Health and Recreation**

Goal: To promote healthy lifestyles for our citizens through the use of the BRTC

#### **STRATEGIES**

- Extend the existing BRTC to its ultimate 8 or more miles and include a variety of trail surfaces to support multiple recreational activities
- Promote the BRTC as a premier setting for leisurely activities, special events, and outdoor expeditions
- Provide outdoor facilities along the BRTC to promote healthy lifestyles
- Create seasonal opportunities for citizens to use the BRTC as a functional waterway for activities such as kayaking and fishing



Trails have been found to encourage active lifestyles in the people who have easy access to them. Trails in natural settings also offer the benefits of stress relief and relaxation. The current BRTC trail already attracts walkers, runners, skaters, nature enthusiasts, and more. Participants at the community workshop supported these uses, but also indicated that even more uses for the trail corridor would be desirable, including equestrian, hiking, and mountain biking on natural surfaced trails.

Implementation of the health and recreation goal and its strategies will primarily involve developing additional trail segments of the BRTC and park nodes along the trail that could provide other complementary outdoor facilities like children's play areas and exercise equipment. A dream of using the river for paddling activities could come to fruition seasonally and more if the water in the river can be augmented.

Recognizing the benefits to Stephenville residents, college students, and visitors, BRTC advocates will actively promote the use of the existing and future segments of the trail by individuals and groups for organized events. The trail has already been the venue for fun runs, like the Stephenville Education Foundation's Color Run. The City Park can accommodate large events with parking and staging areas for activities offered on the trail. The pavilion below Graham Street also can serve as the race event headquarters. Other events could include festivals, youth group activities, geocaching, nature tours, bike rides, and more.



## **Education**

Goal: To provide educational opportunities, through design and facilities, for educational institutions and the general public

#### **STRATEGIES**

- Utilize the entire 8 mile section of the Bosque River as an "Outdoor Laboratory", providing numerous learning opportunities along the trail, including a permanent outdoor classroom for organized activities.
- Showcase wildlife, natural and culture heritage features along the trail
- Establish research and service opportunities for public and private schools, Tarleton State University, and local, state and federal agencies
- Provide marketing for the BRTC to promote the trail and its educational opportunities

A component of the Bosque River Trail Corridor Mission is to "provide educational opportunities for current and future generations". Additionally, the Vision "to be a model river and trail corridor" includes focusing on education. With this mission and vision in mind, an Education Subcommittee was formed to research and identify areas in which the BRTC could be used for educational purposes by students of all ages as well as the general public. Outdoor classrooms can be as simple as using the riverbanks for fishing.

The Education Subcommittee identified five project areas which will enable the BRTC to become an integral part of the Stephenville community for both educational institutions and the general public.



Stephenville High School's outdoor classroom

- Renovation of North Shapard Avenue using
  Thurber bricks. Located in the vicinity of the Stephenville Historical
  House Museum, the bricking project will replicate the way some
  Stephenville streets were originally paved beginning in 1929. A
  brick-surfaced Shapard Avenue would lead to a bricked parking area
  providing access to the BRTC and the museum complex.
- Interpretive walks with artistic yet informational signage strategically placed throughout the BRTC to educate both students and the general public on its wildlife, vegetation, ecosystems and natural history. Stephenville ISD teachers and administrators are partnering with professors and students in the Wildlife Management Department at Tarleton State University to develop a program in which Tarleton students teach SISD students topics related to the BRTC. A partnership with The Cross Timbers Fine Arts Council will provide students with opportunities to participate in an art contest with the winners having their artwork/interpretive signs displayed along the BRTC.



**Example of youth created interpretive sign, Salt Springs Island, BC** 

- Adopt a trail segment in which persons involved in service organizations at both the local schools and Tarleton will participate in helping to keep the BRTC clean and free of debris.
- A website showcasing the BRTC will be designed and kept up-to-date by Tarleton web-design classes. The site will include activities occurring on the existing trail as well as plans for future development.
- A cooperative effort between Stephenville ISD and Tarleton State University students will create presentations which will include short biographies of people connected to Erath County and Stephenville, information pertaining to native plants and animals, the usage of plants by Native



Tarleton students conduct river cleanups.

Americans and early residents, stories of the settlement of the areas along the Bosque River, interviews with people telling of their experiences in the area, and information regarding the development of Stephenville and the surrounding area. Students in technology classes will be utilized to develop a QR code system for BRTC visitors to access the historical information.

# Restoration

Goal: To promote the ecological restoration of the BRTC with respect to its health, integrity, and sustainability

#### **STRATEGIES**

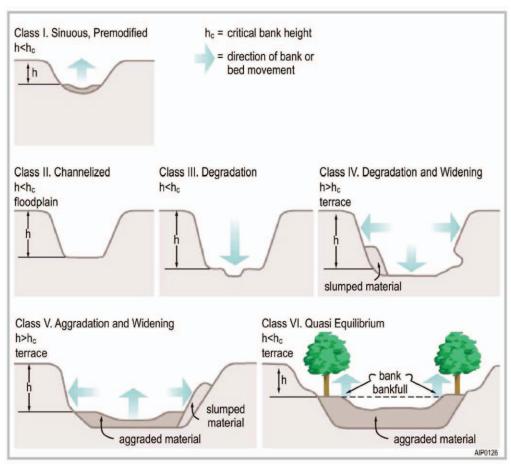
- Restore the BRTC to a more natural environment
  - > Remove invasive species along the BRTC and replant with native vegetation
  - > Identify and improve locations where stream channel morphology, design, and natural function can be enhanced
- Establish community-wide cleanup events to remove trash along the BRTC
- Establish a wetland ecosystem in the Bosque River Trail Corridor
- Facilitate activities which will lead to the Bosque River being removed from the "impaired waterway" list under Section 303(d) of the Clean Water Act.

The Bosque River Trail Corridor's restoration goal was created to address water quality and quantity issues that occur in the upper portion of the Bosque River. The proposed re-creation of a bio-diverse ecosystem along the Bosque River recognizes the need to restore the river and its banks to a healthy and sustainable condition.

The morphology of a stream refers to the shape of the channel and its floodplains and banks. A healthy shape is relatively stable and allows a river at flood stage to flow across floodplains. Initial stream bank degradation occurs when heavy rainfall events pass down river with too much velocity. Velocity of the flow in rain events increases when the watershed is covered with impervious surfaces, like paving and buildings, and when upstream tributaries do not have enough vegetative buffers along them to absorb water and slow the water flow. In some portions of the Bosque River, banks have eroded causing silt from the banks to contribute to deteriorated water quality. As banks become increasingly unstable, erosion continues.

To help remedy this, the BRTC is seeking to integrate watershed monitoring into the BRTC trail experience. Through documentation of degraded streambank morphology, project partners can plan for restoration activities. Some of the actions can involve replanting the riparian areas or floodplains next to the river while others would need to involve heavy equipment to re-slope some of the steeply eroded banks. Non-native invasive species could be removed and replanted with native vegetation for wildlife benefits and bank stabilization. Concept designs for necessary restoration needs of affected sections of the BRTC will likely involve a combination of traditional flood control practices, low impact development in the watershed, and natural channel design solutions.

Other efforts will need to focus on restoring water quality with the aim of full recovery of the Bosque River and removal of the North Bosque as



The Upper Bosque River shows Class III and IV level degradation of its morphology, according to Texas AgriLife.

an impaired water from the State of Texas Clean Water Act list. Current automated water quality monitoring could be enhanced with volunteer sampling assistance and additional data gathering. A wetland ecosystem design created in 2005 by the U.S. Army Corps of Engineers is still a project that could contribute to improved water quality as well as provide visitors with an education experience.



Waco's manmade wetlands can serve as a model for Stephenville.

# **Transportation**

Goal: To provide options for all members of the community to access the BRTC

#### **STRATEGIES:**

- Provide adequate parking, including ADA and bicycle parking, for the BRTC at multiple trail head locations
- Provide pedestrian and bicycle facilities to connect targeted centers of activity to the BRTC and integrate into the City's thoroughfare plan
- Install signage to advertise the BRTC and to guide users to trail heads and access points
- Identify and encourage access from multiple residential and business areas

The BRTC committee recognizes that the Bosque River Trail Corridor will be more beneficial to the citizens of Stephenville if it is integrated into the transportation system. Participants at the community workshop were asked to identify places in town they would like to see connected to the trail. Workshop attendees marked certain streets as routes to connect the trail to important activity centers. Such activity centers included the downtown business area and courthouse square, Tarleton State University's main campus, Stephenville's public schools, hospital and medical areas, and senior residential areas – all places that are destinations for purposeful trips.

After reviewing the many ideas for using streets to connect the trail to parts of town, the BRTC advocates recommend a citywide bike and pedestrian plan that will be integrated into the City's Thoroughfare Plan. Such a plan would identify the best places to locate additional pathways, on-street bicycle facilities (marked routes, painted bike lanes, and shared lanes for bikes and vehicles), and sidewalks. Ideally the result will be a comprehensive network of bike and pedestrian facilities connecting to the BRTC. Such a network will encourage and facilitate the BRTC's usage for recreational purposes as well as for destination-oriented travel from the trail user's chosen Point A to Point B within the greater Stephenville community.

Another need to improve the use of the BRTC now and in its future full development is an attractive and well-placed wayfinding signage system within the greater Stephenville community. The wayfinding signs would indicate to people who are near the trail the direct way to find an access point. Major trailheads would include parking areas for people who live too far to arrive at the trail by bike or on foot. Minor trailheads could be as minimally developed as trailhead kiosks with maps, and they could be included at any place where a street ends adjacent to the trail.







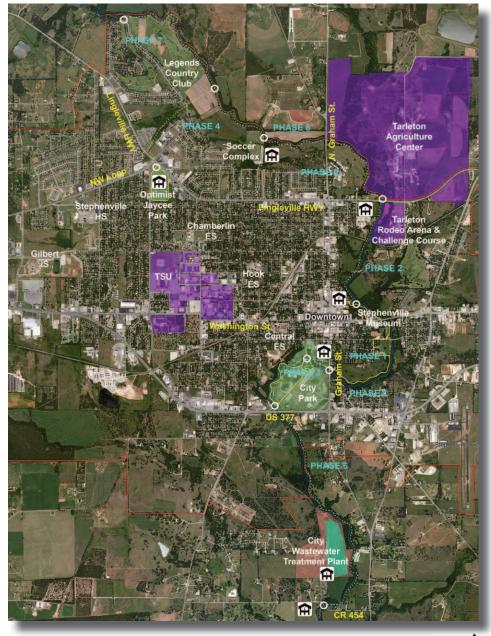
Chapter 3



# **Recommended Corridor Improvements**



One of the primary purposes of the BRTC planning effort is to recommend physical improvements to meet the goals for the river and its surrounding corridor. Proposed corridor improvements emphasize activities that bring people closer to the Bosque River to enjoy it without impacting its natural scenic qualities. The map below shows an approximately 8-mile river corridor: the proposed trail is along the length of the river from northwest Stephenville through the city, then continuing south of City Park to the wastewater treatment plant outside the city limits. In addition to the trail itself, the concept includes major and minor trailheads where people access the trail, visitor amenities at the trailheads, park nodes along the trail with adjacent facilities to enjoy, educational places showcasing the Bosque River ecology and watershed, and identified restoration opportunities along the river. Corridor advocates also envision connecting the trail to key destinations in the city using bikeways and sidewalks; this would encourage active lifestyles and help Stephenville become a walkable and bikeable community.



# **Proposed Trail Segments**

The BRTC project developers propose breaking the trail extensions into segments for easier implementation. Phase I is the existing trail which was discussed earlier in this plan. After the gap in the trail is completed, connecting to the existing Bosque River Trail (BRT) through Texas Parks and Wildlife's Recreational Trail Fund, trail users will be able to enjoy 2.8 miles of hard-surfaced trail. The BRTC Advisory Committee recommended seven additional phases.



## Phase 2: Tarleton-Vine to Lingleville Highway

This 1.3-mile trail segment extends the existing trail northward to Lingleville Highway (SH 8). With funding awarded from the Texas Department of Transportation's Statewide Transportation Enhancement Program in 2013 and the City's matching funds, the segment is slated to be completed in 2015. The trail will be similar in design to the existing one, concrete-surfaced and suitable for bicycles, skaters, strollers, wheelchairs and pedestrians.



The City owns some lots at the current trail ending at Tarleton and Vine Streets that can be improved as a trailhead with a small number of parking spaces. The closest access between the BRT and Tarleton State University's main campus is a route along Tarleton Street, a distance of 17 blocks. Improvements for bikes and pedestrians on Tarleton Street would provide better access to the trail. The downtown square is a destination only 6 blocks away. Wayfinding signage would help visitors and residents make their way between the trail and destinations in the area.



Phase End Point



Potential trailhead site for the Phase 2 segment

#### The Bosque River Trail Corridor - Chapter 3 - Page 18

This segment takes users under the Fort Worth and Western Railroad trestle, a feature that will appeal to railroad buffs using the trail. Other destinations in the vicinity of this segment include the Harris Methodist Hospital, Tarleton's challenge course and rodeo grounds, and the Tarleton Farm. All would need side trails or on-street improvements to make better, safer connections.



Traveling under the Fort Worth & Western Railroad trestle will be a unique experience. Photo credit: Drew Wells

The church property at the intersection of the river with Lingleville Highway would make a suitable major trailhead for those wishing to park their cars to use the trail. The church has indicated its willingness to work with the City.

## **Phase 3: City Park North Trail Link**

The City of Stephenville proposes to build 2,000 linear feet of 10-foot wide concrete trail in the Stephenville City Park, with funding from the Texas Parks and Wildlife Department – Texas Recreational Trails Fund Program. The linear trail will follow the north bank of the North Branch of the Bosque River and connect to existing trails for a total length of 16,000 linear feet. Also included in the project is a small parking lot and connecting drive. The trail and parking lot will be fully accessible.



The east end of the proposed trail connects to the BRT on the west side of Graham St. (SH 108). The BRT extends 8,000 linear feet east and then north following the Bosque River. The proposed trail will also connect the west end of the BRT with a pedestrian bridge, which crosses the river and provides access to the majority of City Park amenities including its walks and trails. This project would complete a segment of the City Park Master Plan.



The proposed trail will follow gentle gradients, making it suitable for a variety of users including walkers, bicyclists, wheelchairs, baby strollers, and skaters. The existing bridge over the river, to which the proposed and existing park trails connect, contains steps, and therefore, a replacement bridge is needed for the entire connection to be usable for wheeled users.

Phase End Point



A "desire" line path indicates where the new addition will connect to the BRT.

## Phase 4: Optimist-Jaycee Park to Stephenville Soccer Association Area

This 1.4-mile segment would connect Optimist-Jaycee Park with the Soccer Fields, likely by following along a tributary of the Bosque part of the way and partly along the Bosque River. The large Optimist-Jaycee Park with existing parking area would need only wayfinding signage to make it a major trailhead directing users to reach the northwest end of the Bosque River Trail. There is a 0.7 mile loop trail inside the park that would be connected to the BRT. Trail users will need a specially designed highway crossing to traverse the very busy intersection of Lingleville Road (Highway 8) and Northwest Loop.



A trail segment connected to the Optimist-Jaycee Park would be close to the high school and to medical facilities in the area. Having a trail segment in this area gives residents and visitors safe access to healthy outdoor exercise paths. It will pass through existing developed neighborhoods and commercial areas. These nearby destinations would need trails or on-street connections be safely connected.



As one of the more urban segments of the trail, the desired surface would likely be hard surface suited to pedestrians, bicyclists, skaters, strollers, and wheelchairs. Soccer players would be able to go to their games on bicycles. The portion along the river would be designed to give users a woodland experience while the tributary and cross-field connections would be through open areas.

Phase End Point



The trail from the Bosque River to Optimist-Jaycee Park might follow the floodplain of this wet-weather creek.

## Phase 5: Lingleville Highway to Stephenville Soccer Association Area

The segment of proposed trail between the end of the TxDOT-funded phase 2 and the Stephenville Soccer Association property is approximately 1.4 miles in length. At the southeast end of this segment, the trail would share the trailhead being proposed at the Lingleville Highway for Phase 2. At the northeast end, the proposed trailhead is recommended in the area of the soccer fields. This latter would need additional acreage for trailhead parking as the soccer association often fills their parking lot.



Legend

Stephenville Schools

North Bosque River

Existing Trail

Proposed Wetland

Oity Limits

City Parks

City Parks

Phase End Point

BRTC enthusiasts look toward the tree-lined river corridor east of the Stephenville Soccer Association property.

This segment is currently rural in character and most of the trail could be located within the riverside wooded area. providing shade along the trail. At the workshop, many participants expressed a desire for equestrian use in addition to the bicycle-pedestrian-friendly characteristics of the existing and funded trails. Tarleton Farm is across the river for a portion of this segment, lending it to retain much of the agricultural character into the future. Access between the trail and the Tarleton Farm might generate equestrian use; however, it would require a bridge or a designated ford area to make a connection.

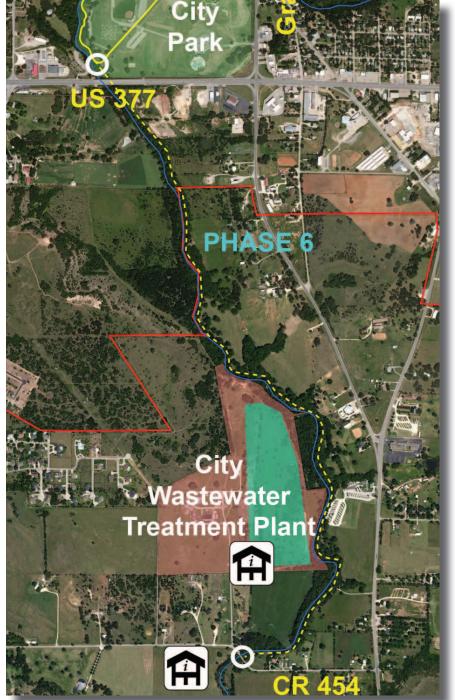
The Foster's Home for Children is adjacent to this section of the river on the south side. The President of Foster's Home for Children provided a letter of support for the trail project citing the benefits for their children and the community at large. The Stephenville Soccer Association also endorsed the trail concept, saying their soccer families might travel to the fields on the trail and also that players could run the trail during practice.



Big trees line the Bosque River near the North Graham Street Bridge.

## Phase 6: City Park to Wastewater Treatment Plant/CR 454

The trail system along the Bosque within City Park ends at the southwest corner of the park. From there, this phase of the trail is proposed to continue 2 miles south following the Bosque River until reaching CR 454, the road that accesses the city's Wastewater Treatment Plant. Part of the route is within the city limits and the remainder within the jurisdiction of Erath County. It would pass an RV park that could market campsites to visitors with trail interests.

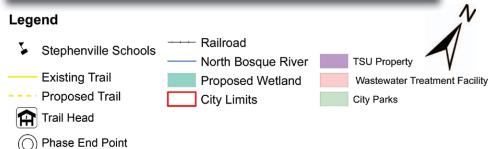


An additional water quality aspect of the BRTC effort would be a constructed wetlands project on some of the floodplain area at the wastewater treatment plant. If completed, this could be the anchor attraction at the south end of the trail corridor. Nature trails through the wetlands would provide educational experiences along with scenic ones.



A view of the Bosque River from CR 454

Participants at the trail planning workshop suggested that this portion of the proposed trail, mostly rural in character, could be suitable for a more rustic trail surface. With a natural design, it could serve hikers, equestrians, and trail bicyclists.



## **Phase 7: Northwest Stephenville**

Phase End Point

There are approximately 1.5 miles of Bosque River northwest from where the river trail links with the Optimist-Jaycee Park connector. This segment would be a good candidate for a riverside trail extension as development continues on this northwest side of the city.



The trail would sweep around the edge of the Legends Country Club golf course and be an amenity for the residential neighborhoods in the vicinity, both current and future. The wooded corridor along the river is rural and the trail may begin as a rustic, natural trail and later be improved with hard surfacing, as the population demands it.

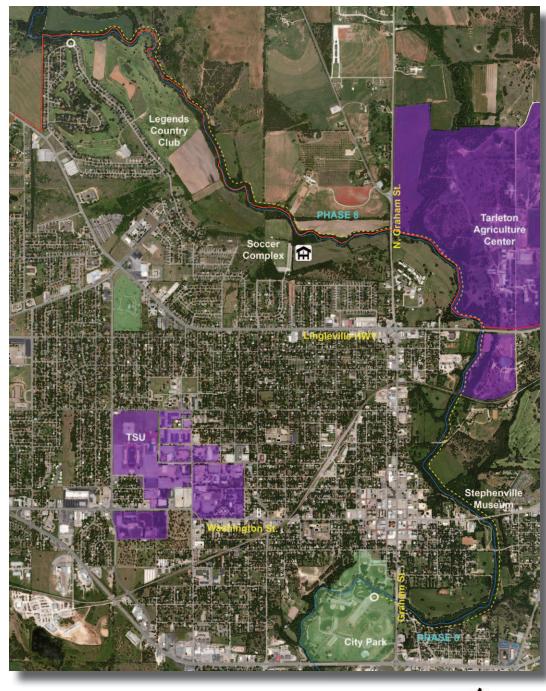




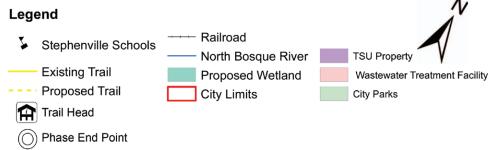
Looking toward the Bosque's wooded banks on the horizon.

# Phase 8: North and East Sides of Bosque River

The final phase of the Bosque River Trail Corridor would target the side of the river away from most of Stephenville. A distance of approximately 4 miles would follow the river on the opposite side from the existing trail. It could begin in City Park on the south side near existing parking areas, go under South Graham and continue on the east side and then the north side until it reaches a place where it would need to bridge back across the river to meet with the trail to Optimist-Jaycee.



This segment would connect several Tarleton State University properties – the rodeo facilities, challenge course, and two areas of the farm. Workshop participants targeted this area for equestrian use, citing the image of Stephenville as the Cowboy Capital and the several areas of horse programs along the route. If a proposal to use some of the riverside areas on Tarleton's farm for outdoor classrooms came to fruition, this could also be a destination to link along this portion of the trail. A special feature found along this segment, just east of City Park, is a shelter cave naturally carved into a bluff.





Tarleton's Challenge Course backs up to the riparian woods on the north side of the Bosque River where a long-term trail segment is proposed.

The rural character of this area along with the equestrian focus could lend this trail surface to be natural soil instead of hard-surfaced. A natural surface would provide a more wilderness experience for hikers and trail bicyclists as well. As Stephenville grows, a hard-surfaced trail might be placed alongside the natural trail to provide commuting trips for bicyclists and pedestrians.

#### **Total Trail Miles**

The existing BRT, plus the trails inside City Park and Optimist-Jaycee Park, currently provide approximately 3.3 miles of built trail. The already-funded trail extensions will add an additional 1.3 miles along the river and 0.2 miles within City Park to make the BRT a continuous 4.3 miles. If phases 4-7 are completed, the spine trail called BRT would provide residents and visitors the use of an 11.3-mile trail along the Bosque River. A parallel trail on the other side of the river, phase 8, could add an additional 4-mile trail opportunity for the community.



The Bosque's wooded banks near North Graham might offer a rustic equestrian trail on the north side.

# **Trailheads & Park Nodes**

As the Bosque River Trail Corridor develops, improvements such as additional trailheads and park facilities will become of great value to the community. With each additional segment of the trail, new major or minor trailheads will be developed. In addition to trailheads, educational classrooms, river restoration sites, restrooms, playgrounds, and

other park facilities will improve the value of the corridor.

Major Trailheads – Major trailheads should be placed throughout the 8-10 miles of the Bosque River Trail Corridor with at least one every mile and a half. Major trailheads should consist of a parking area and a map of the trail. In addition to the parking area, water fountains, restrooms, and playgrounds will enhance major trailheads if the natural landscape allows for such development. Workshop participants and survey respondents indicated a strong desire for restrooms to be placed at trailheads.



Kiosks directs users to the trail at minor trail heads.

Minor Trailheads – Minor trailheads are much less developed than major trailheads, but they still improve the trail and corridor. Minor trailheads are informational and allow users to access the trail from multiple areas throughout town and determine their location on the trail. Wayfinding signs placed along streets can direct people to access the trail. The more access points provided along the trail, the more users will be encouraged to come to the trail.





Examples of major trailheads with parking and restrooms



Workshop participants would like water fountains.

**Natural Playgrounds** - Natural playgrounds improve the recreational opportunities throughout the corridor, and they blend in with the natural wooded corridor of the Bosque River Trail. They can be placed at major trailheads and/ or various places throughout the trail corridor. Using natural rocks and logs is likely to lower the cost compared to purchased playscapes.

#### **Examples of playscapes with natural materials**



Outdoor classrooms typically have seating for students.

**Outdoor Classroom** – Outdoor classrooms add excellent educational facilities and can be located in more than one place within the corridor. These "classrooms" come in various forms and are best if they are designed to coincide with the natural environment of the corridor.

Environmental Restoration Projects – Environmental restoration projects provide great educational opportunities as well as opportunities for the community to experience wildlife in its natural habitat. Environmental restoration projects will benefit the corridor's wildlife population, enhance the water quality of the North Bosque River, and increase the aesthetic value of the area.

In 2005 the U.S. Army Corps of Engineers designed a plan for a created wetland in the vicinity of the City's wastewater treatment plant. The

wetland project was not funded at that time; however, current BRTC advocates are resurrecting the idea and exploring funding opportunities. A wetland project could also serve as a hands-on teaching location as well as a scenic destination for trail users to enjoy at the south end of the BRTC.



Some bank work and plantings can be done with volunteers

An example of a creek shoreline in southeast Texas after restoring contours and revegetating

# **Connectivity: On-Street Connections**

A combination of wayfinding signage and designated connection bicycle and pedestrian facilities from key area locations to the BRTC will provide multiple enhancements to the community at large and to BRTC visitors.





Signage showing the overall layout of the BRTC is recommended to be placed at significant locations such as the major trailheads, the Stephenville downtown square, Tarleton State University's campus, Stephenville Independent School District campuses and other school sites, Stephenville Historical House Museum, and major population, employment and visitor centers.

Directional signage created around a specific color scheme and theme along major thoroughfares throughout the area will similarly "drive" visitors to the BRTC.

Wayfinding signage placed at gaps along the BRTC where the trail is disrupted by roads, intersections and other obstacles will also improve the visitors' experiences and create opportunities to attract new visitors.

Designated connection routes may be sidewalks, on-street bikeways or bike-ped trails. Designated and improved connection routes which provide access to the BRTC will similarly benefit the Stephenville community at large and BRTC visitors specifically. Sidewalks, bikeways and trails connecting Tarleton State University and the Stephenville Independent School District campuses to the BRTC are a first priority. Additional connections to major population centers (nursing homes and major apartment complexes), employment and visitor attractions are also desired.





Bike paths may be on-street lanes

painted on roadways or simply designated routes with signage. Bike-ped facilities connecting to the BRTC should be part of an over-all transportation scheme that is thoughtfully and cohesively designed. All designated connectors should be included on the wayfinding signage. It is recommended that the City of Stephenville undertake a bicycle and pedestrian planning effort to incorporate into the City's Thoroughfare Plan.

Well-placed and attractive wayfinding signage and a well-planned network of connecting bike-ped facilities will serve to integrate the larger community into the BRTC experience and to enhance the overall experience of visitors to the BRTC by:

- Improving enjoyment and understanding of the BRTC
- Improving safety and accessibility for all visitors
- Attracting new visitors
- Encouraging visitors to experience more areas in the BRTC, and
- Fostering improved stewardship of the land and of the Bosque River.

# **Paddling the Bosque River**

One excellent way for people to gain a greater appreciation of rivers is to experience them from a human-powered boat. Paddlers enjoy rivers that are clear and clean. Paddlers that see close-up the trash that ends up in the river rarely litter themselves.

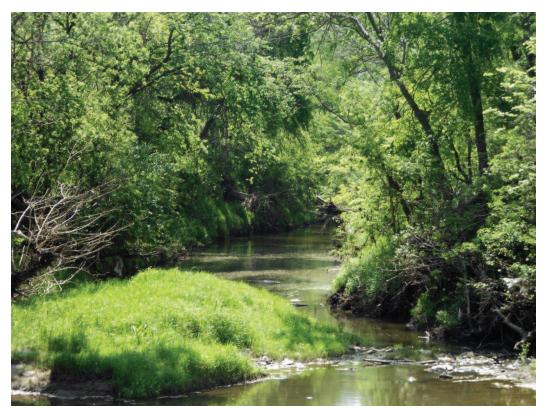
Earlier BRTC planners wondered whether the amount of water in the Bosque River in Erath County could support canoeing and kayaking at least in the wetter seasons of the year. In the recent drought years, that answer may be "no", unless actions are taken to increase the amount of water in the river. One action to consider involves revegetating bare river banks to create a "riparian sponge" that holds rainwater and releases it back into the river over a longer timeframe. Other efforts could include pumping water from wells, piping it from ponds in the watershed, and increasing reuse of treated wastewater pumped upstream.



Tarleton students kayak through City Park when conducting river clean-ups.

The best likelihood of having sufficient seasonal paddling water in the BRTC area

would be from City Park to the City's wastewater treatment plant on County Road 454. One non-motorized boat launch might be provided inside the park where parking is fairly close to the river bank. A take-out access site could be included in the design of the BRTC trailhead proposed in the vicinity of the wastewater treatment plant. Public road crossings of the Bosque below CR 454 do not appear for many river miles downstream. Any additional access site



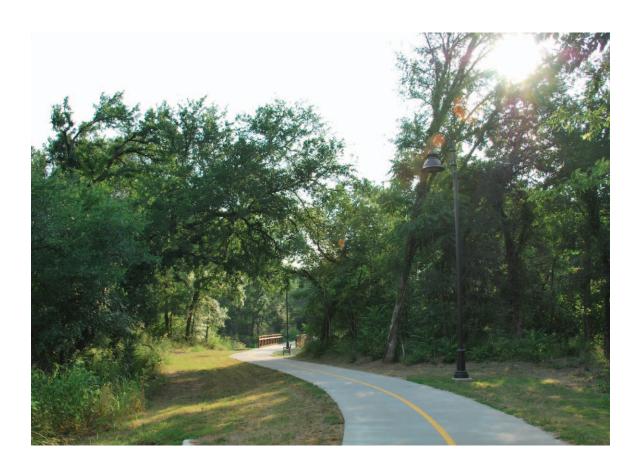
to participate.

within a half-day paddle would need a willing private landowner

In very wet seasons, paddling may be possible downstream of Long Street.

Chapter 4





"You can comprehend a piece of a river. A whole river that is really a river is much to comprehend unless it is the Mississippi...and you spend a lifetime in its navigation...A piece, then...it has meaning which makes it worth the trouble. But if you are like me, neither the certainty of change, nor the need for it, nor any wry philosophy will keep you from feeling a certain enraged awe when you hear that a river that you've known always, and that all men of that place have known always back into the red dawn of men, will shortly not exist. A piece of river, anyhow, my piece...." John Graves, Goodbye to a River.

The Bosque River Trail Corridor (BRTC) Project is a model community-based initiative designed to promote and sustain a riverside trail system in the north central Texas Cross Timbers region along over eight-plus miles of the Bosque River, located in the City of Stephenville, Texas. The trail is envisioned to be interpretive, highlighting different habitats and ecosystems, as well as historic sites within the corridor. The BRTC is a diverse project, focused on preservation, recreation, and education and is the result of a community's commitment to celebrate "its river." The project is led by local citizens in coordination with the City of Stephenville and engages over 20 private and public organizations, including Keep Stephenville Beautiful, the Stephenville Independent School District, Tarleton State University, the Stephenville Historical House Museum, and Texas A&M AgriLife.

The corridor will highlight the importance of the river as a natural resource, including the successful efforts to improve water quality since 1998, and provide for recreation as well as education outreach. The Bosque River flows though the community of Stephenville beginning at the city's northern border near the Optimist-Jaycee park, then winds in a slow "S-curve" adjacent to Tarleton State University's Agricultural Center, the Stephenville Historical Museum complex, and the downtown business district. In all, the BRTC Project will enhance over eight miles of the river corridor and link the city's two major parks totaling 130 acres with a spine trail and a network of additional side linkages to area historical museum sites, youth organization facilities, schools, and a proposed wetlands area. The completed system will promote the area's natural resources and historical heritage along the Bosque River while helping improve our community's quality of life and the health of its citizens.

The City of Stephenville and the Bosque River are woven together, both physically and historically. The BRTC will preserve and celebrate this relationship for both current and future generations.

In Texas, we have a deep respect for water, both water quality and quantity. We know what it is to be thirsty and to have our thirst quenched. We know the look of a dry lawn or pasture only too well.

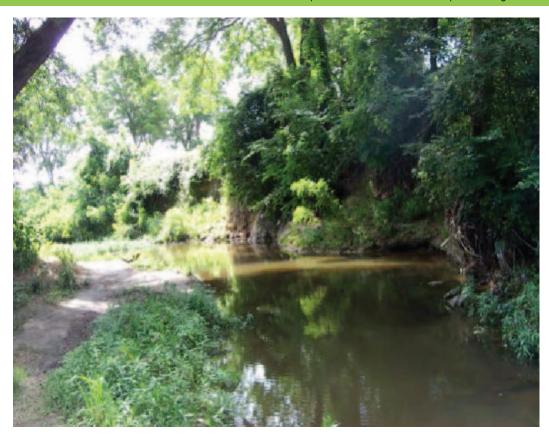
When the waters of the Bosque River began showing signs of pollution, the people who used the river as a water source had to ask themselves something that we have not had to ask in nearly a hundred years: how clean is our water? The debates over clean water in the late twentieth century left the community struggling to engage calmly and thoughtfully with each other. In 1996, the Texas Commission on Environmental Quality (TCEQ) identified high concentrations of



Current trails off Washington St. Photo Credit: Plan-it ink, Treva Wygle

nutrients and algae as a problem in the North and Upper North Bosque River forks, and two years later, segments of the North Bosque River were deemed 'impaired waters' on the State of Texas Clean Water Act list

A search for workable solutions began. As a consequence of the high degree of environmental, regulatory, and political scrutiny of the Bosque River, new rules, regulations and management practices were put in place to sustain and improve water quality within the Bosque watershed. Since then, stakeholders in the watershed have voluntarily undertaken additional measures to improve the river's quality. The Bosque is on a path to recovery



as a source of water for wildlife, livestock, and for human needs and enjoyment.

The BRTC project will elevate those efforts; it is a cornerstone in the community's reclamation of the river. The hard lessons the Bosque teaches us give us an advantage over those who turn on their tap and expect clean water. We understand that clean water requires wise choices and steadfast community interest. Our Bosque River demands that we re-imagine how we use it and how we protect it. Simply stated, the goal of this project is to celebrate and preserve the Bosque River.

The successful efforts to restore the North Bosque River Watershed provide us a model for river

reclamation and restoration in the State of Texas. Not only will the BRTC project tell the story of a region working to successfully recover its impaired waterway, it will offer new recreation and educational opportunities to local residents, university students, and visitors to the area. A trail throughout a protected green space corridor along the river introduces people to a previously hidden river resource. When a river

is no longer "out of sight, out of mind", people become better stewards of the river and the watershed. When the river is loved by folks who come there to exercise, explore nature, and find The BRTC project will elevate those efforts; it is a cornerstone in the community's reclamation of the river. Simply stated, the goal of this project is to celebrate and preserve the Bosque River.

tranquility from their busy lives, the river gains their appreciation as the lifeblood of water for human use, agriculture needs, and the wildlife and plants that live there.

Stephenville City Park trails.
Photo Credit: Plan-it ink, Treva Wygle

The City of Stephenville and the Bosque River are woven together, both physically and historically. The BRTC will preserve and celebrate this relationship for both current and future generations. With the success of the corridor project, the region and city built along the banks of the Bosque River will once again be able to proudly say, "this is my piece of the river."

# Appendix A



# **Strategic Plan Planning Process**

## **Overview**

In 2011, Keep Stephenville Beautiful (KSB) added improving the Bosque River Trail Corridor (BRTC) to its scope of community beautification work. The first tasks involved cleaning up a dump site off Floral Street in the Bosque River floodplain and removing large amounts of flood debris piled up at the Long Street crossing and Washington Street bridge. In 2012, KSB and the City of Stephenville jointly prepared an application to the National Park Service's Rivers, Trails and Conservation Assistance Program requesting assistance to develop a Bosque River Trail Corridor Strategic Plan. The National Park Service awarded an assistance grant to the BRTC project, and over the next two years, KSB, the City of Stephenville, the National Park Service, and many local partners undertook a series of planning steps and actions to move the project forward.

# **Start-up Phase**

## **Steering Committee**

The BRTC Steering Committee first convened in Fall 2012 with 21 members (see Acknowledgements section). Individuals serving on the BRTC Steering Committee represent key entities in the community – City of Stephenville, Erath County, Tarleton State University, Stephenville Independent School District, Keep Stephenville Beautiful and other civic organizations, and environmental entities that have focused on river efforts. The BRTC Steering Committee provided policy guidance and approved various planning activities throughout the process, including recommending this Strategic Plan for adoption by the City of Stephenville.

#### **Subcommittees**

In early 2013, the BRTC Steering Committee formed two subcommittees to actively participate in the BRTC project tasks. The Community Participation and Planning Subcommittee included 13 members. This Subcommittee's charges included recommending community input processes, designing the survey and community workshop, developing strategies for informing the community about the BRTC project and opportunities to participate in the planning process, and identifying individual and group stakeholders to include in the notification process. Some of this Subcommittee served as facilitators at the workshop and writers of sections of the planning documents.

A second subcommittee also began its work in 2013. Initially called Programs, Events, and Education, the initial 14 members shortened the name to Education Subcommittee. This group's charges included promoting the trail – its

extension and its active use, enhancing the corridor through stewardship projects, and educating about river health and ecology. The group quickly grew to 25 members and became the focus of many participants from Tarleton State University and the Stephenville Independent School District.

#### Mission, Vision, Goals, & Strategies

The initial development of a mission for the BRTC Steering Committee's participants and a vision for the future conditions of the Bosque River Trail Corridor was drafted by a small group of writers and thinkers in 2013. The language that was adopted by the BRTC Steering Committee and included in this Strategic Plan was edited over the next year and half as the participants became more familiar with the project and its potential. The results of this task are included in Chapters 1 and 2 of this plan and include discussions of the four goals: Health and Recreation; Education; Restoration; and Transportation.

# **Community Input**

#### Survey

The Community Participation and Planning Subcommittee recommended conducting an on-line survey targeted at the community at large. The survey was available to respondents for 40 days from March 1 – April 10, 2013. Many project partners promoted the survey through email lists, on website homepages, in the newspaper, at civic group meetings, and more. The result was 774 respondents, a very respectable number that indicates interest in the BRTC project. The results of the questions included in the survey are summarized at the end of this chapter.

#### Workshop

A community workshop to gather public input to the BRTC project plan was held on April 18, 2013 from 4:00 – 6:00 p.m. at the Graham Street Church of Christ Family Center. The workshop was announced in the newspaper, and thousands of individuals received emailed invitations sent by KSB, the City, the County, Tarleton, and civic organizations. Approximately fifty people participated in the workshop, which included presentations on the BRTC project's work to date, the survey results, and ways to get further involved. The majority of time was spent in break-out groups focused on recommending locations for trailheads and amenities to be added along the trail. Participants were also asked to



identify destinations in town that should be connected to the trail via sidewalks, bikeways, and other means. They also identified desired trail uses for each of several zones within the 8-mile reach of the Bosque River. Representatives from each of the five break-out groups orally presented their group's findings to all of the workshop participants

# **Plan Development**

#### **Trailheads**

After the community input workshop in spring of 2013, the National Park Service compiled the recommendations from the workshop's five break-out groups. Approximately twelve areas were suggested to be considered for future BRTC trailhead development. With the help of maps created by the City of Stephenville's Community Development Department, a small team of BRTC project partners visited the areas proposed in the workshops that could be accessed. Using a set of assessment criteria, the team evaluated the potential trailheads and developed recommendations for the Community Participation and Planning Subcommittee and the BRTC Steering Committee. The following criteria were considered in recommending future trailheads:

- Topography accessible from the roadway and not too steep for siting improvements
- Space for public parking and other improvements
- Near or within a destination a park, public facility, or thoroughfare
- Likely willing partner or seller.

## **Trail Segments**

Using the selected trailhead locations, the Community Participation and Planning Subcommittee described eight segments of the BRTC trail and recommended a phased order for the trail's development. Phase 1 is the existing 1.5 mile trail while phases 2 and 3 are the extensions that have already received funding. The phased order, as approved by the BRTC Steering Committee, is based on several factors that included:

- The presence of public land and/or likely willing landowners
- Proximity to populated residential areas
- Geographic distribution
- Connection to important destinations.

#### Writing and Graphic Layout

Members of the Community Participation and Planning Subcommittee authored various chapters and sections of the draft plan, and the National Park Service compiled the components. Several editors provided their reviews to help make the writing cohesive and represent the adopted goals, strategies, and priorities. Many participants in the BRTC project offered photographs. Again, the City of Stephenville's Community Development Department provided the maps. KSB, with the help of some NPS funds, was able to hire a local graphic artist, Treva Wygle of Plan-it ink.

# **Community Review**

Keep Stephenville Beautiful and the National Park Service hosted an Open House event on March 20, 2014 from 6:00 – 8:00 p.m. to showcase the draft Bosque River Trail Corridor Strategic Plan. Once again, the venue was the large Graham Street Church of Christ Family Center. Over 70 people were in attendance. Stephenville Mayor Kenny Weldon welcomed everyone and acknowledged the many partners that helped develop the plan. Kathryn Nichols, Community Planner with the National Park Service, presented a slide show of the draft plan document. Printed copies of the plan along with large printed maps of each of the recommended eight phases of the trail were on display for attendees to review. Comment forms were provided for attendees to suggest additions or modifications to the draft, and the draft plan was reviewed and revised in light of those suggestions.

# **Implementation**

# **Funding and Leadership**

The BRTC Steering Committee expects implementation of the recommendations in the Strategic Plan to be undertaken through a combination of government grants, funding awarded by foundations, donations from areas businesses and individuals through fundraising campaigns, and in-kind contributions of students, civic organizations, and individual volunteers. The City of Stephenville has already budgeted matching funds for government awards and that practice is likely to continue where possible. To date, the City of Stephenville has taken ownership of the trail corridor and managed the funds for trail construction and capital improvements. The BRTC Steering Committee welcomes this continued role. There may however be trail locations in the future phases where another partner might be the lead, such as where trail is proposed on land owned by Tarleton State University. The partners have created a list of potential funding sources by categories.

## Programs, Projects and Plans for Education, Restoration and Transportation

Project partners also envision efforts other than just trail construction as part of the overall BRTC project. The Education Subcommittee has identified some projects that have strong partnership elements in their implementation (see Chapters 2 and 3), and more are likely to follow as the corridor extends and the community participation grows. To date, the partners are developing a Memorandum of Understanding (MOU) that can spell out roles for those entities that are expected to jointly sign the MOU. There are likely to be additional targeted plans developed subsequent to the adoption of this strategic plan, including a Bike-Pedestrian Plan as part of the City's Thoroughfare Plan, and Restoration Plans to further develop efforts to improve the watershed and the river's hydrology, morphology, and water quality and quantity.

# Appendix B



# **Survey Results**

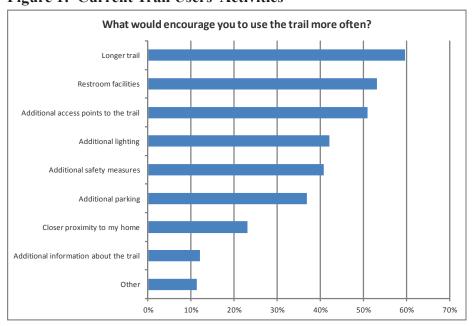
# Introduction

The community survey that was completed in April, 2013 garnered 774 respondents who answered questions on their current trail use patterns, and desires for improvements to the trail and for environmental outcomes for the river corridor. Eighty-four percent of respondents live in Stephenville; all but a few live in Erath County or an adjacent county. Respondents were asked to report a few demographics about themselves. Compared to the 2010 population census of Stephenville, the respondent pool was somewhat overrepresented by women (64% of respondents vs. 53% actual) and by whites (94% of respondents vs. 89% actual).

# Trail Usage

Seventy-six percent of respondents said they already use the existing trail, using it an average of 4.6 days per month. Figure 1 figure shows the activities in which trail users are engaged.

Figure 1: Current Trail Users' Activities



Trail users were asked "What would encourage you to use the trail more often?" The main answer was that it needed to be longer, followed by a desire for restrooms and more access points and lighting. All their answers are shown in Figure 2. For those survey respondents who indicated they had not used the existing trail, they were asked why they were not using the trail. Their primary reason was that they weren't familiar with it, followed by "too far" and "safety concerns." See Figure 3 for all their reasons.

Figure 2: Improvements Desired by Trail Users

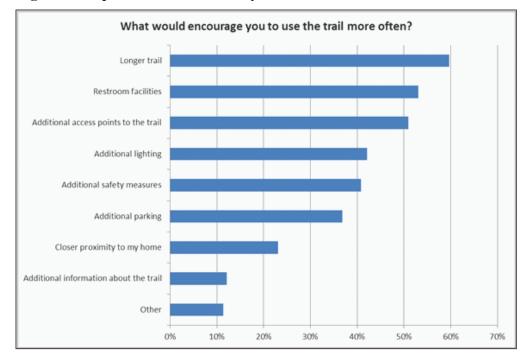
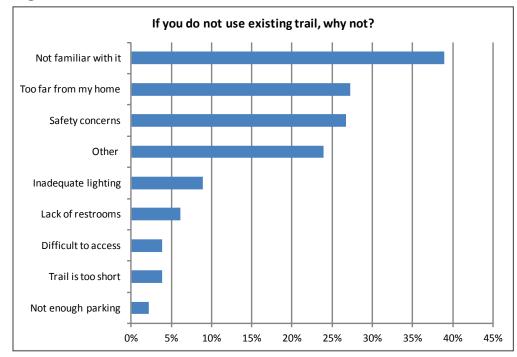


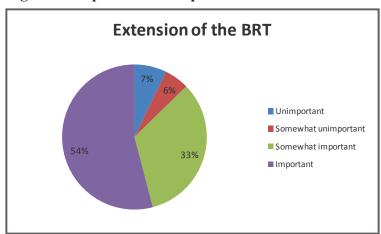
Figure 3: Reasons Non-users Don't Use the Trail

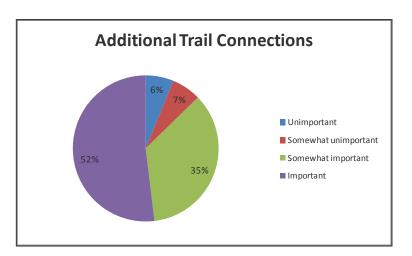


## **Trail Preferences**

Survey respondents reported the importance for them of some possible outcomes of the BRTC plan. The top two trail outcomes are shown in Figures 4 and 5. Their answers indicate overwhelming support for extending the trail and adding connections from the trail to areas of town.

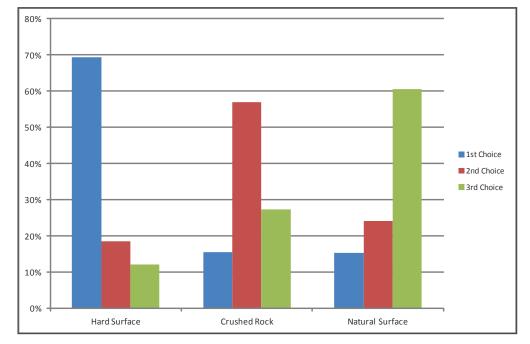
Figure 4: Importance of Top Trail Outcomes





Respondents were asked to give their first, second and third choices for trail surfaces. Almost 70% of respondents preferred hard surfaced trail, like the current existing trail, followed by crushed rock as a second choice. Though natural surface trail came in third, there were about 12% of respondents who preferred it as their first choice. In a follow-up question to suggest other surfaces, a number expressed a desire for a combination of surfaces in various settings. See Figure 5.

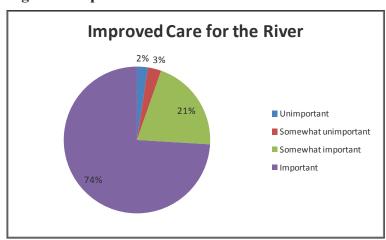
Figure 5: Preferred Trail Surfaces



# **Corridor Projects and Facilities**

Several questions allowed respondents to weigh in on the importance of outcomes and a variety of projects that might be proposed within the Bosque River corridor in addition to trail construction. When asked about the importance of various outcomes, more than 90 percent named care of the river and water quality as either important or somewhat important.

Figure 6: Top Environmental Outcomes.



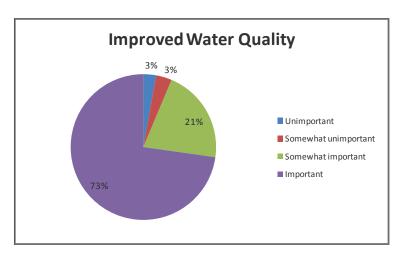
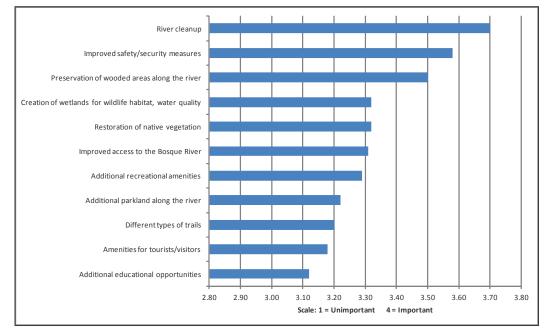


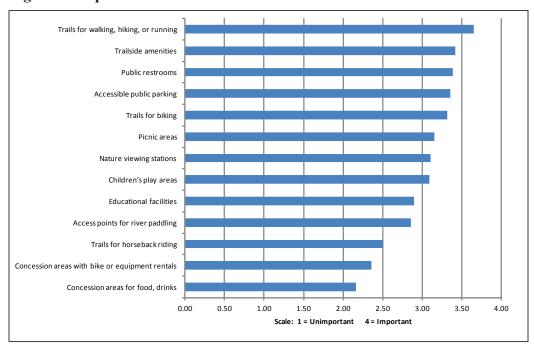
Figure 7 shows the weighted average of importance for a list of projects that might be developed to improve the corridor as a community asset. All scores are above 3, indicating a weighted average of at least somewhat important, with most tending toward a higher level of importance.

Figure 7: Importance of Projects in River Corridor



In addition to asking about the importance of project activities, respondents were also asked to rate the importance of specific facilities. Any facilities with a score of 3 or higher indicate a majority of answers of important or somewhat important.

Figure 8: Importance of New Facilities



# **Open-Ended Comments**

Survey respondents were asked to provide additional information or thoughts they would like to share about the Bosque River Trail or Bosque River corridor. Of the 774 people who participated in any of the survey, 254 took the time to enter comments in their own words. Of those 254, 76 percent (or 194) gave positive comments about the existing trail or the proposed trail extension, including some requests for improvements. Twenty-four percent made negative comments about the project. The negative statements most often focused on concerns for safety or security, perceptions of poor river conditions, or preferences that expenditures be undertaken in other ways.

#### **Examples of Survey Respondents' Comments:**



- "Best thing S'ville has done for itself in a while!"
- "I want to be a part of any effort to ensure that this resource is appreciated and maintained for generations."
- "It is always a pleasant day when I can walk the Bosque River Trail."
- "One of the best ideas ever!"
- "I can't wait to see Stephenville finally take advantage of the river running right through our town."
- "I love taking my children on walks there very scenic and peaceful for any family activity."

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Appendix C





# BOSQUE RIVER TRAIL CORRIDOR ADVISORY COMMITTEE

#### NATIONAL PARK SERVICE

Kathryn Nichols, Community Planner Facilitator

#### BRAZOS RIVER AUTHORITY

Trey Buzbee, Government and Customer Relations Manager

#### CITY OF STEPHENVILLE

Kenny Weldon, Mayor Scott Evans, City Council Mark Kaiser, City Administrator Drew Wells, Director of Community Services Cary Strohmeyer, Parks and Recreation Advisory Board

#### CHAMBER OF COMMERCE

July Danley, President/CEO

#### **ERATH COUNTY**

Tab Thompson, County Judge

#### ERATH COUNTY EXTENSION SERVICE

Whit Weems, Ph.D, Director Ag Services

#### KEEP STEPHENVILLE BEAUTIFUL

Daron Trussell, President Metta Collier, Vice-President Michele Dunkerley, BRTC Alisa Starbird, BRTC Jason Lovell, Past President

# STEPHENVILLE ECONOMIC DEVELOPMENT FOUNDATION, INC.

Willy DeJong, President Ron Mullins, Past President

#### STEPHENVILLE HISTORICAL HOUSE MUSEUM

Dianne Wilson, Secretary/Board Member

#### STEPHENVILLE INDEPENDENT SCHOOL DISTRICT

Darrell Floyd, Ed.D, Superintendent Kathy Ray, Ed.D, Assistant Superintendent, Personnel, Instruction, & Administration Ann Calahan, Ph.D., School Board President TSU Curriculum & Instruction Department Head

#### TARLETON STATE UNIVERSITY

F. Dominic Dottavio, Ph.D, President Kyle McGregor, Ph.D, Chief of Staff

# COMMUNITY PARTICIPATION/PLANNING SUB COMMITTEE

#### KATHRYN NICHOLS, CHAIR

National Park Service Facilitator

#### LARRY BERAN, PH.D

Senior Research Scientist AgriLife

#### ANN CALAHAN, PH.D

SISD School Board, President TSU Curriculum & Instruction Dept. Head

#### METTA COLLIER

Keep Stephenville Beautiful BRTC/NPS Project Director

#### JULY DANLEY

Chamber of Commerce President/CEO

#### MICHELE DUNKERLEY

Keep Stephenville Beautiful BRTC/NPS Project Director

#### **VAN EVANS**

Stephenville Runner's Association

#### JAMES MARSH

Research Geohydrologist & Watershed Scientist AgriLife

#### ALISA STARBIRD

Keep Stephenville Beautiful BRTC

#### **CARY STROHMEYER**

Parks & Recreation Advisory Board, President City of Stephenville Stephenville Soccer Association

#### KENNY WELDON

Mayor, City of Stephenville BRTC/NPS Project Director

#### DREW WELLS

Director of Community Services City of Stephenville

#### **EDUCATION SUB COMMITTEE**

#### DR. DARRELL FLOYD, CHAIR

Stephenville ISD Superintendent

#### DR. KATHY RAY, VICE-CHAIR

Stephenville ISD

Assistant Superintendent of Personnel, Instruction & Administration

#### DR. LARRY BERAN, Ph.D

Senior Research Scientist AgriLife

#### DR. JEFF BREEDEN

Professor of Wildlife Management Tarleton State University

#### DARRELL BROWN

Executive Director of Student Engagement for Division of Student Life Tarleton State University

#### DR. JILL BURKE

Dean of College of Education Tarleton State University

#### DR. ANN CALAHAN

Curriculum & Instruction, Dept. Head Tarleton State University

#### **METTA COLLIER**

BRTC/NPS Project Director Keep Stephenville Beautiful

#### MICHELE DUNKERLEY

BRTC/NPS Project Director Keep Stephenville Beautiful

#### D'ANNA GREEN

Coach & Wildlife Instructor Stephenville ISD

#### DR. CHRIS HIGGINS

Professor of Biology Tarleton State University

#### **CASEY HOGAN**

Stephenville City Council Assistant Athletic Director, TSU

#### DR. LINDA JONES

Dean of College of Graduate Studies Tarleton State University

#### JAMES MARSH

Research Geohydrologist & Watershed Scientist, AgriLife

#### DR. KYLE MCGREGOR

Chief of Staff

Tarleton State University

#### DR. KAREN MURRAY

Provost and Vice President for Academic Affairs Tarleton State University

#### KATHRYN NICHOLS

Community Planner National Park Service

#### DR. JAMES PIERCE

Dean of the College of Education Tarleton State University

#### DR. STEVE STEED

Interim Dean of College of Business Tarleton State University

#### DR. KELLI STYRON

Dean of College of Liberal Arts Tarleton State University

#### DARON TRUSSELL

President

Keep Stephenville Beautiful

#### KENNY WELDON

Mayor

BRTC/NPS Project Director

#### DREW WELLS

Director of Community Services City of Stephenville

#### **DIANNE WILSON**

Secretary, Board of Director Stephenville Historical House Museum

#### MINDY WOOLEY

Foundation Director Stephenville ISD

#### NATIONAL PARK SERVICE ASSISTANCE GRANT LETTERS OF SUPPORT

#### AGRILIFE EXTENSION – TEXAS A&M SYSTEM

Don Cawthon, Ph.D Resident Director

#### AGRILIFE EXTENSION – TEXAS A&M SYSTEM

Donald W. Kelm

District Extension Administration-District 8

#### BOSQUE RIVER COALITION

Charles Markham-Hico, TX

President

#### BRAZOS RIVER AUTHORITY

John B Hofmann

Regional Manager, Central & Lower Basin

#### CHAMBER OF COMMERCE

July Danley

President, CEO

#### **CITY OF STEPHENVILLE**

Kenny Weldon

Mayor

#### **ERATH COUNTY EXTENSION**

Whit Weems, Ph.D

#### **ERATH COUNTY**

Tab Thompson

County Judge

#### FARM CREDIT SERVICE

Jay Kidwell

Vice President

#### FOSTER'S HOME FOR CHILDREN

Glen Newberry

**Executive Director** 

#### KEEP STEPHENVILLE BEAUTIFUL

Jason Lovell, President

Keep Stephenville Beautiful

#### NATIONAL RESOURCES CONSERVATION SERVICE

Tony Huffman

District Conservationist

USDA. NRCS

# STEPHENVILLE ECONOMIC DEVELOPMENT FOUNDATION, INC.

Ron Mullins

President

#### STEPHENVILLE HISTORICAL HOUSE MUSEUM

Robin Ritchie, President

Dianne Wilson

Secretary, Board of Directors

#### STEPHENVILLE INDEPENDENT SCHOOL DISTRICT

Darrell G. Floyd, Ed.D

Superintendent of Schools

#### STEPHENVILLE STUDY CLUB

Patricia Weldon

President

#### STEPHENVILLE SOCCER ASSOCIATION

Cary Strohmeyer

#### TARLETON STATE UNIVERSITY

F. Dominic Dottavio, Ph.D.

President

#### TEXAS DAIRY ASSOCIATION

Darren Turley

**Executive Director** 

#### TEXAS DEPARTMENT OF TRANSPORTATION

Maribel P. Chavez, P.E.

District Engineer, Fort Worth District

#### TEXAS HEALTH - HARRIS METHODIST

Christopher T. Leu

President

#### TEXAS HOUSE OF REPRESENTATIVES

Sid Miller, District 59

# TEXAS INSTITUTE FOR APPLIED ENVIRONMENTAL RESEARCH

Dan Hunter

**Executive Director** 

Tarleton State University

#### UNITED COOPERATIVE SERVICES

Seth Rosser -Burleson

Business Development/Key Accounts Coordinator

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Plan- it ink Graphics/Photographs

#### **Meeting Locations**

City Hall Graham Street Church of Christ Family Center Stephenville Historical Museum Stephenville ISD Administration Building Tarleton State University

# HEALTH & RECREATION EDUCATION RESTORATION TRANSPORTATION









