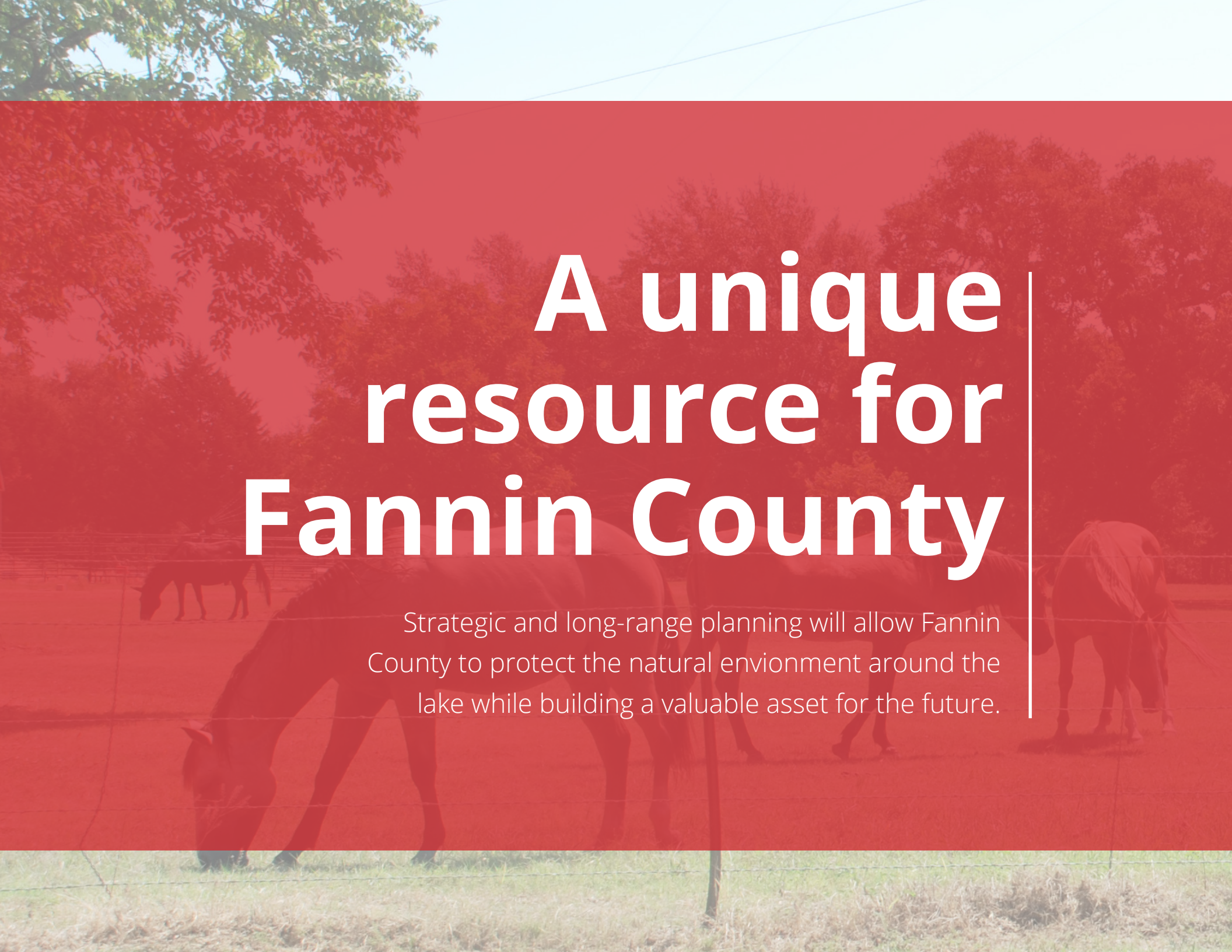


*Fannin County's Comprehensive Plan for*

# **Lower Bois d'Arc Creek Reservoir**

Adopted on October 18, 2016



# A unique resource for Fannin County

Strategic and long-range planning will allow Fannin County to protect the natural environment around the lake while building a valuable asset for the future.

# Table of Contents

History	1
Chapter 1   Baseline Analysis and Existing Conditions	3
Chapter 2   Vision and Issue Identification	31
Chapter 3   Future Land Use Plan	53
Chapter 4   Transportation Plan	73
Chapter 5   Parks, Recreation, Trails, and Connectivity	85
Chapter 6   Lake Edge Development Standards	99
Chapter 7   Implementation Plan	117
Appendix	129

# History

## *of the Lower Bois d'Arc Creek Reservoir*

---

With north central Texas becoming one of the fastest growing regions in the state, Fannin County officials anticipated that this growth would greatly affect different facets of development in the County, particularly the need for water. The North Texas Municipal Water District (NTMWD) is a regional provider of water, wastewater, and solid waste disposal services. It currently serves a population of approximately 1.6 million residents, which is projected to more than double by 2070. In order to meet the needs of the expected population, as well as to support businesses, jobs, and economic prosperity in the region, a reliable water supply is critical; therefore, the Lower Bois d'Arc Creek Reservoir (LBCR) project commenced.

The NTMWD began studying the lake and considered it a potential reservoir in 1984. Further studies were conducted, but it was not until 2004 that a push for the construction of the LBCR began. In late 2004, Fannin County officials held a series of meetings with NTMWD regarding the construction of the LBCR. From the meetings, an understanding was developed between

the two entities. An economic study was completed in 2004, and updated in 2007 and 2012, that analyzed the potential impacts of a new reservoir on Fannin County. In 2004, the City of Bonham and NTMWD executed a contract that allowed Bonham to become a customer of the NTMWD. In the contract, NTMWD agreed to plan, design, construct, finance, operate, and maintain a new water treatment plant to serve the residents of Bonham.

Fannin County Commissioners Court passed a resolution on March 28, 2005 that endorsed and encouraged the State and Federal permitting actions required for the proposed LBCR and requested that NTMWD undertake all costs associated with the permitting and future construction of the LBCR. The resolution also encouraged the formation of a local entity that would represent not only the interest of the County, but also the communities, cities, towns, and water providers located within the County during the planning, permitting, and construction of the reservoir.

The Fannin County Water Supply Agency (Agency) was



formed as recommended by the County. On March 22, 2007, the Agency passed a resolution that endorsed and encouraged the NTMWD to undertake the permitting and construction costs of the proposed LBCR. The following year, the Agency passed another resolution that authorized the execution of a Memorandum of Agreement (MOA) with NTMWD, which stated that NTMWD would provide a water supply to any member of the Agency through a water supply contract between the Agency and NTMWD. The MOA was finalized and became effective on March 3, 2009.

With the support of the County and the NTMWD, Texas Local Government Code Chapter 231, Subchapter G, was amended effective April 29, 2011 to grant Fannin County the authority to zone “the area within 5,000 feet of where the shoreline of the Lower Bois d’Arc Creek Reservoir would be if the reservoir were filled to its storage capacity.” This zoning authority will help ensure cohesive development around the LBCR.

### Projected Lake Information

for more information visit: [www.ntmwd.com/bois\\_dArc](http://www.ntmwd.com/bois_dArc)

- The lake is projected to be under 516’ at least 10% of the time (based on historic hydrologic record of 50 years)
- The lake is projected to be over 534’ at least 10% of the time (based on historic hydrologic record of 50 years)
- The lake will be between 516’ and 534’ at least 80% of the time (based on historic hydrologic record of 50 years)
- Water will run over the spillway at 541’
- The projected average inflow is 200,000 acre-feet (an acre-foot is the volume of one acre of surface area to a depth of one foot)

*Source: LBCR Environmental Impact Statement*

# Chapter 1

## *Baseline Analysis and Existing Conditions*

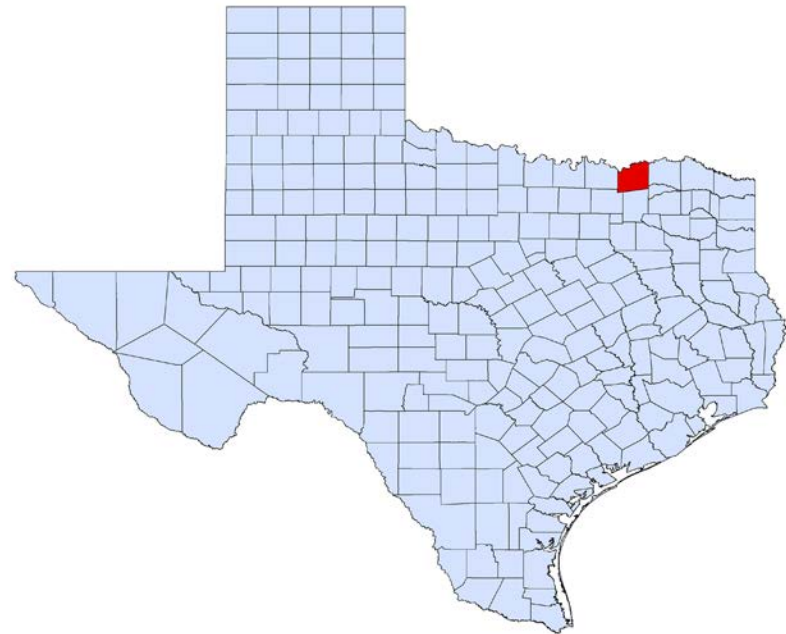
**Chapter Purpose:** To document existing conditions and establish a framework for the comprehensive plan

### Introduction to the Plan

#### Background

The Lower Bois d'Arc Creek Reservoir (LBCR) is an approximately 16,500-acre proposed lake on Bois d'Arc Creek in Fannin County. The LBCR is a recommended water supply source for the North Texas Municipal Water District (NTMWD) that is expected to meet the water needs of the growing region, which includes Fannin County. The NTMWD began studying this lake in 1984 and filed for a Texas water rights permit in December 2008. In 2015, the State of Texas issued a water right to NTMWD to construct the lake with a capacity of 367,609 acre-feet and a reliable water supply of 120,000 acre-feet per year. The LBCR will be owned and operated by the NTMWD. Water from the lake will be used to meet the growing demands of the NTMWD customers, provide water to users in Fannin County, and provide recreational opportunities to the region. This project is a critical component to NTMWD's long-range water supply plan. The LBCR is not only expected to provide a much needed water supply, but the construction and use of the lake is also expected to be an economic boost to Fannin County and surrounding areas.

**Fannin County Regional Location**





## Purpose of the Plan

The purpose of this Comprehensive Plan is to establish a vision for how the land around the LBCR should develop. The content found within this plan will serve as a guide for County officials, as well as residents, for development-related decisions such as roads, land uses, and parks. The plan will also guide the development of the zoning ordinance, which is how much of the vision of the plan will be implemented. The creation of a comprehensive plan and zoning ordinance presents a unique opportunity for Fannin County and its residents. This is the first time within the State of Texas that a county will develop and adopt a comprehensive plan and zoning ordinance prior to the construction of a reservoir.

## Statutory Authority

Authority of certain counties in Texas to create a comprehensive plan is granted by Chapter 231 of the Texas Local Government Code. Chapter 231 of the Texas Local Government Code also outlines the legal requirements for zoning regulations to be enacted around certain lakes and reservoirs in Texas.

## Planning Area

The LBCR will be located in the north central portion of Fannin County, approximately 70 miles northeast of Dallas. The planning area for this Comprehensive Plan is the land that lies within a 5,000 foot buffer off the shoreline of the reservoir, which is 534 feet above mean sea level (AMSL). The planning area is shown in Figure 1.

### Chapter 231

*Chapter 231 of the Texas Local Government Code enables Fannin County to regulate zoning within the area that is 5,000 feet from the Lower Bois d'Arc Creek Reservoir shoreline.*

## Previous Planning Studies

### Lower Bois d'Arc Creek Reservoir Transportation Plan

Portions of the LBCR Transportation Plan summarize the discussions, agreements, and results of an effort between the NTMWD, Texas Department of Transportation (TxDOT), and Fannin County. The plan was developed in 2011 to identify and address future transportation needs in the area once the LBCR is constructed. This plan proposes that FM 1396 be abandoned and that several county roads be improved, for a total cost of approximately \$37.24 million.

### Texoma Comprehensive Economic Development Strategy

The Texoma Comprehensive Economic Development Strategy (CEDS) is a regional plan created by the Texoma Council of Governments that is updated every five years to provide assistance with the development of Cooke, Fannin, and Grayson Counties. The current plan was developed in 2012 to address planning efforts through 2017. The CEDS has developed four goals that will aid the advancement of the Texoma Region as a robust regional economy:

1. To implement unified regional economic development initiatives,
2. To advance the region's economic progress through the use of current and pertinent data,
3. To increase the economic competitiveness of the region in the global economy, and
4. To advance high-quality infrastructure and community improvements to support development, redevelopment, and revitalization of the built environment and social fabric.

### Economic Development Study

An economic development study called "Update of the Economic, Fiscal, and Developmental Impacts of the Proposed Lower Bois d'Arc Reservoir Project" was completed in March 2012 and updated in January 2015. The purpose of the report was to provide an update of the previous economic assessments done in 2004 and 2007. The report concluded the following about the economic impact of the lake to Fannin County:

- During the construction phase of the dam, local economic activity will increase between \$509 million and \$563 million for Fannin County,
- This activity will contribute between \$211 million and \$324 million in gross county product and support between 4,999 and 5,525 person-years of employment with associated labor income between \$165 million and \$183 million,
- Visitors to the lake will bring \$17 million to \$22 million in new annual spending to the local economy,
- It is estimated over a 30-year period at least 1,100 new full-time residents will be established around the lake,
- An additional 2,100 residences will likely be built as vacation/weekend/second homes,
- The construction of the new homes will bring an average of 133 jobs per year to the local economy, and
- At full development, property taxes on new housing alone will add \$1.9 million to county tax revenue, school district revenue will be \$3.9 million per year, and local sales tax will generate at least \$303,000 per year with an additional \$183,000 in hotel occupancy taxes.





## Demographic Profile of Fannin County

### Historical Population and Growth Trends

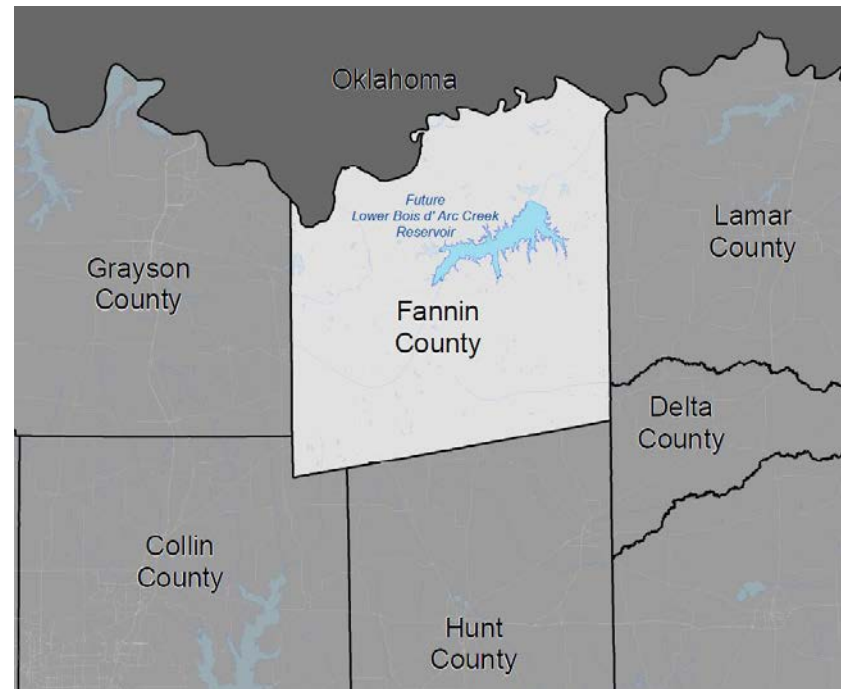
People are the most important component of any community. The following discussion is intended to provide insight into the historical and existing characteristics of Fannin County residents. This demographic analysis will aid in planning for future growth of the County.

The population of Fannin County has experienced significant fluctuations since the 1900s, as shown in Table 1. The periods with the greatest rate of population growth occurred from 1990 to 2000, with a population change of approximately 6,438 people or a compound annual growth rate (CAGR) of 2.33 percent. There were several periods in which Fannin County experienced high levels of population decline, with the most significant occurring between 1940 and 1950 with a decrease of 9,811 people. According to the Texoma Council of Governments (TCOG) population estimate, there were 34,182 people living within Fannin County in 2015. Texas, on the other hand, has not experienced a similar pattern of growth. The State has managed to have a continuous trend of population increase, including the periods when Fannin County experienced a decline.

This could mean that although people were leaving Fannin County, they remained within the State of Texas. Table 2 shows a comparison of the population trends of Fannin County and the surrounding counties. Collin County has experienced the largest population

increase in both population numbers and compound annual growth rate (5.4 percent). Fannin County has grown at a similar CAGR as Grayson County, even though Grayson has a significantly larger population. Lamar and Delta counties have experienced lower CAGR, 0.5 percent and 0.2 percent, respectively.

### Surrounding Counties



**Table 1. Historical Population**

Year	Fannin County			Texas		
	Population	Population Change	CAGR	Population	Population Change	CAGR
1900	51,793	---	---	3,048,710	---	---
1910	44,801	(6,992)	-1.44%	3,896,542	847,832	2.48%
1920	48,186	3,385	0.73%	4,663,228	766,686	1.81%
1930	41,163	(7,023)	-1.56%	5,824,715	1,161,487	2.25%
1940	41,064	(99)	-0.02%	6,414,824	590,109	0.97%
1950	31,253	(9,811)	-2.69%	7,711,194	1,296,370	1.86%
1960	23,880	(7,373)	-2.65%	9,579,677	1,868,483	2.19%
1970	22,705	(1,175)	-0.50%	11,196,730	1,617,053	1.57%
1980	24,285	1,580	0.68%	14,229,191	3,032,461	2.43%
1990	24,804	519	0.21%	16,986,510	2,757,319	1.79%
2000	31,242	6,438	2.33%	20,851,820	3,865,310	2.07%
2010	33,915	2,673	0.82%	25,145,561	4,293,741	1.89%
2013*	33,819	(96)	0.09%	25,639,373	493,812	0.65%

Source: 1900-2010 U.S. Census

**Table 2. Growth of Surrounding Counties**

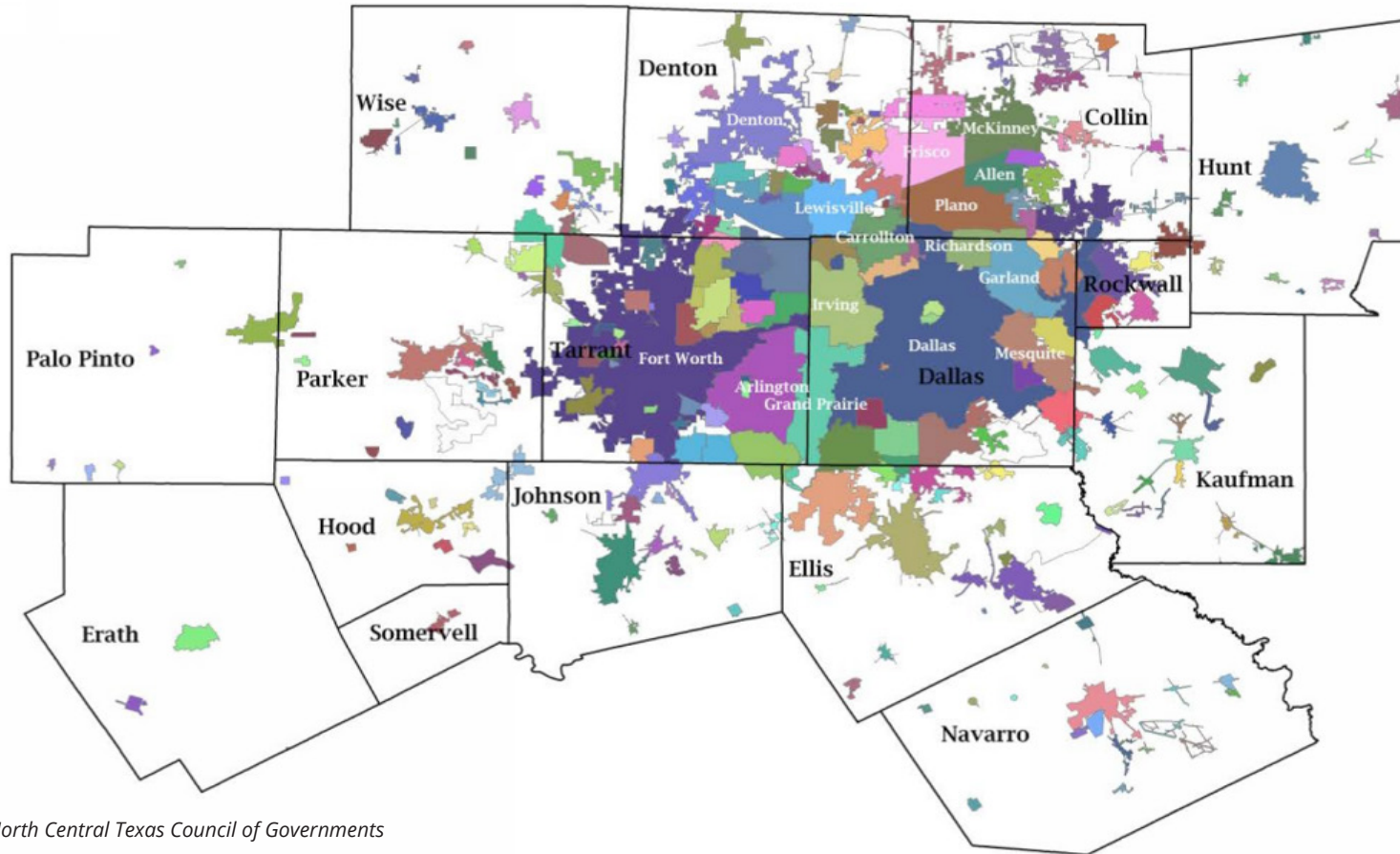
Year	Fannin County	Grayson County	Collin County	Hunt County	Delta County	Lamar County
1980	24,285	89,796	144,490	55,248	4,839	42,156
1990	24,804	95,021	264,036	64,343	4,857	43,949
2000	31,242	110,595	491,675	76,596	5,327	48,499
2010	33,915	120,877	782,341	86,129	5,231	49,793
2013*	33,819	121,292	811,308	86,455	5,237	49,751
CAGR	1.0%	0.9%	5.4%	1.4%	0.2%	0.5%

Source: 1980-2010 U.S. Census, \*2009-2013 ACS 5-Year Estimates

## DFW Growth Affecting Fannin County

The anticipated growth in the North Central Texas Council of Governments (NCTCOG) region - particularly in the NTMWD service area and the DFW Metroplex - was a major influencing factor in the proposal to construct the LBCR. The DFW Metroplex is currently the 4th largest Metropolitan Statistical Area in the country, and according to Vision North Texas 2050, DFW is expected to grow by 4.1 million people between 2000 and 2030. By 2050, the Metroplex is anticipated to have approximately 11.7 million people. The growth is not expected to remain within the boundaries of the NCTCOG region, but instead growth will eventually move away from the DFW Metroplex and into other areas, such as Fannin County.

**Figure 2. NCTCOG Region**



Source: North Central Texas Council of Governments

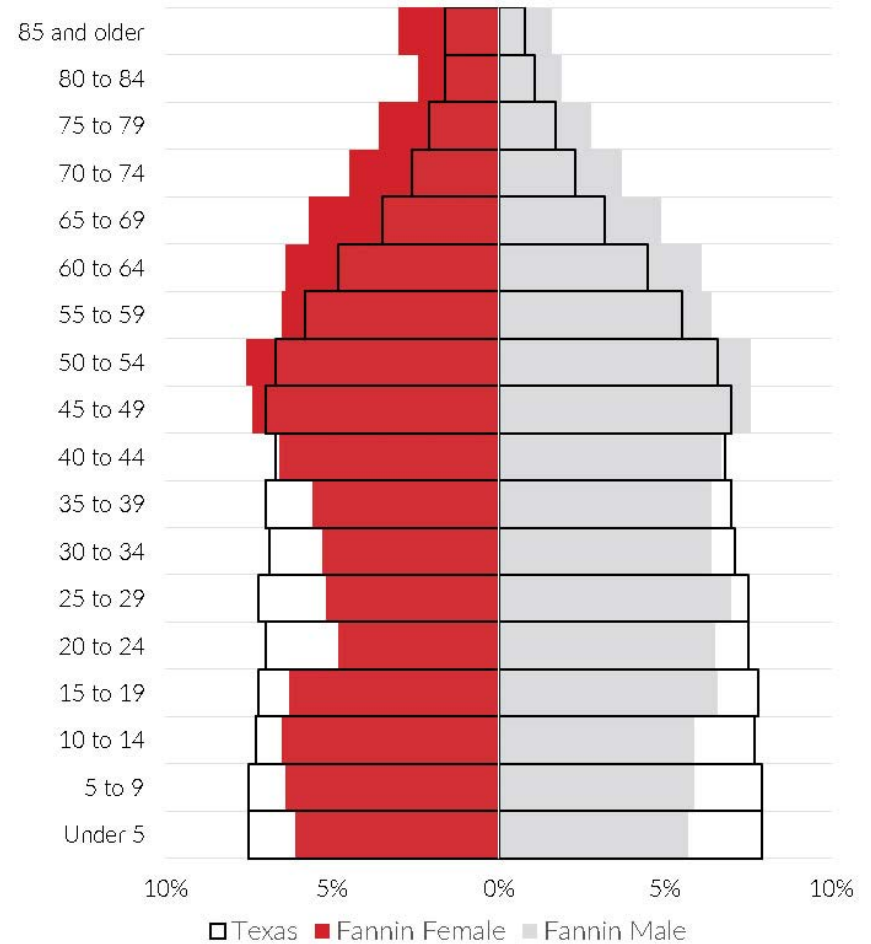
## Gender and Age

Analyzing the age composition within an area can provide insight to what services and facilities may be needed in the future.

Awareness of these age distribution changes will ensure that the area surrounding the LBCR can meet the needs of the local age groups.

The change in age composition for Fannin County, by percentage of each age group, is shown in Table 3. The composition has remained relatively stable since 2000. The greatest increase between 2000 and 2010 occurred in the Older Labor Force age group (45 to 64 years), by approximately 4.6 percent. An increase in this category can indicate a skilled labor force, since people within this category have been part of the labor force for quite some time. The Elderly category, which is representative of senior citizens 65 years and older, shows an increase of the “baby boomer” population within the County. The Young (0 to 14 years), High School (15 to 19 years), College/New Family (20 to 24 years), and Prime Labor Force (25 to 44 years) categories experienced decreases in percentages from 2000 to 2010, which can indicate young singles and young families are leaving Fannin County. The age and gender distribution for the year 2010 can be better observed in Figure 3, in comparison to the State of Texas. Compared to Texas, there is a smaller percentage of ages 0-40 and a larger percentage of ages 45 and older in Fannin County.

**Figure 3. Age and Gender Pyramid**



**Table 3. Age Group Breakdown**

	Young 0-14 yrs	High School 15-19 yrs	College/ New Family 20-24 yrs	Prime Labor Force 25-44 yrs	Older Labor Force 45-64 yrs	Elderly 65+ yrs
2000	19.0%	6.8%	6.3%	28.6%	23.2%	16.1%
2010	18.1%	6.5%	5.7%	24.9%	27.8%	17.0%
% Change	(0.9)%	(0.3)%	(0.6)%	(3.7)%	4.6%	0.9%

Source: 2000 and 2010 U.S. Decennial Census

## Race and Ethnicity

Information regarding race and ethnicity is important to local governments to ensure that all of its citizens are being represented in the decision-making process. Fannin County has a large White population, which is significantly higher when compared to the State. The Black or African American population is significantly lower compared to the State - 6.8 percent in Fannin County compared to 11.8 percent in the State. As shown in Table 4, the County has a comparatively small Hispanic or Latino population, as well as a smaller Two or More Races population.

**Table 4. Race and Ethnicity**

Demographic	Fannin County	Texas
Total Population	33,915	25,145,561
One Race	97.9%	97.3%
White	86.0%	70.4%
Black or African American	6.8%	11.8%
American Indian and Alaska Native	1.1%	0.7%
Asian	0.4%	3.8%
Native Hawaiian and Other Pacific Islander	0.0%	0.1%
Some other races	3.6%	10.5%
Two or more races	2.1%	2.7%
Hispanic or Latino (of any race)	9.5%	37.6%
Not Hispanic or Latino	90.5%	62.4%

Source: 2010 U.S. Decennial Census

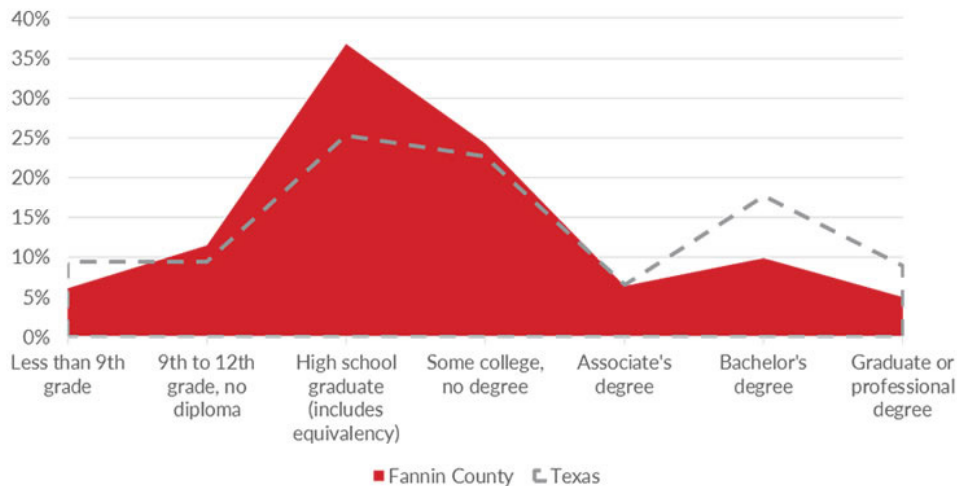


## Educational Attainment

Observing the educational level of a population can indicate the degree of skills and abilities possessed by the residents of the community. This information is important to analyze since it can be useful in attracting businesses to the area, which in turn will increase economic development opportunities.

Table 5 shows a comparison of the educational attainment levels of the citizens (25 years of age and older) of Fannin County and Texas. Similar to other rural communities, Fannin County has a higher percentage of high school graduates as the highest level of education achieved than the State of Texas, 36.8 percent and 25.3 percent respectively. When looking at higher education, approximately 15 percent of the citizens of Fannin County have received a bachelor's degree or higher.

**Figure 4. Educational Attainment**



Source: 2009-2013 ACS 5-Year Estimates

**Table 5. Educational Attainment**

Educational Attainment	Fannin County	Texas
Population 25 years and over	23,552	16,080,307
Less than 9th grade	6.1%	9.4%
9th to 12th grade, no diploma	11.5%	9.4%
High school graduate (includes equivalency)	36.8%	25.3%
Some college, no degree	24.3%	22.7%
Associate's degree	6.4%	6.5%
Bachelor's degree	9.9%	17.7%
Graduate or professional degree	5.0%	8.9%
Percent high school graduate or higher	82.4%	81.2%
Percent bachelor's degree or higher	15.0%	26.7%

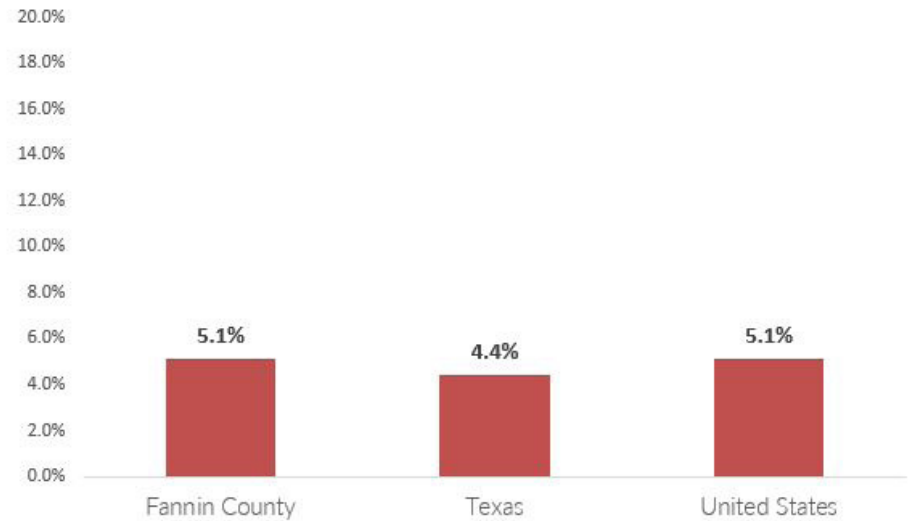
Source: 2009-2013 ACS 5-Year Estimates

## Employment and Occupation Characteristics

Employment opportunities can affect the growth of communities. These opportunities are important because they allow people to settle into a community and establish their home. In Fannin County, it is the proximity to employment opportunities in the DFW region that makes this possible.

Figure 5 shows the unemployment rates from the United States Bureau of Labor Statistics for the month of September 2015. Fannin County had a 5.1 percent unemployment rate, which is greater than the State’s average of 4.4 percent. Table 6 compares the percent of each occupational category for Fannin County and Texas. The most noticeable difference is in the Production, transportation, and material moving occupations category, with 17.7 percent in Fannin County but only 11.8 percent in Texas. The major occupations in the County are Management, professional, and related occupations with 30 percent and Sales and office occupations with 24 percent.

Figure 5. Unemployment Rates (September 2015)



Source: U.S. Bureau of Labor Statistics

Table 6. Occupation

Occupation	Fannin County	Texas
Civilian employed ages 16 years and over	13,627	11,569,041
Management, professional, and related occupations	29.3%	34.6%
Service occupations	16.3%	17.7%
Sales and office occupations	23.9%	24.9%
Natural resources, construction, and maintenance occupations	12.9%	11.0%
Production, transportation, and material moving occupations	17.7%	11.8%

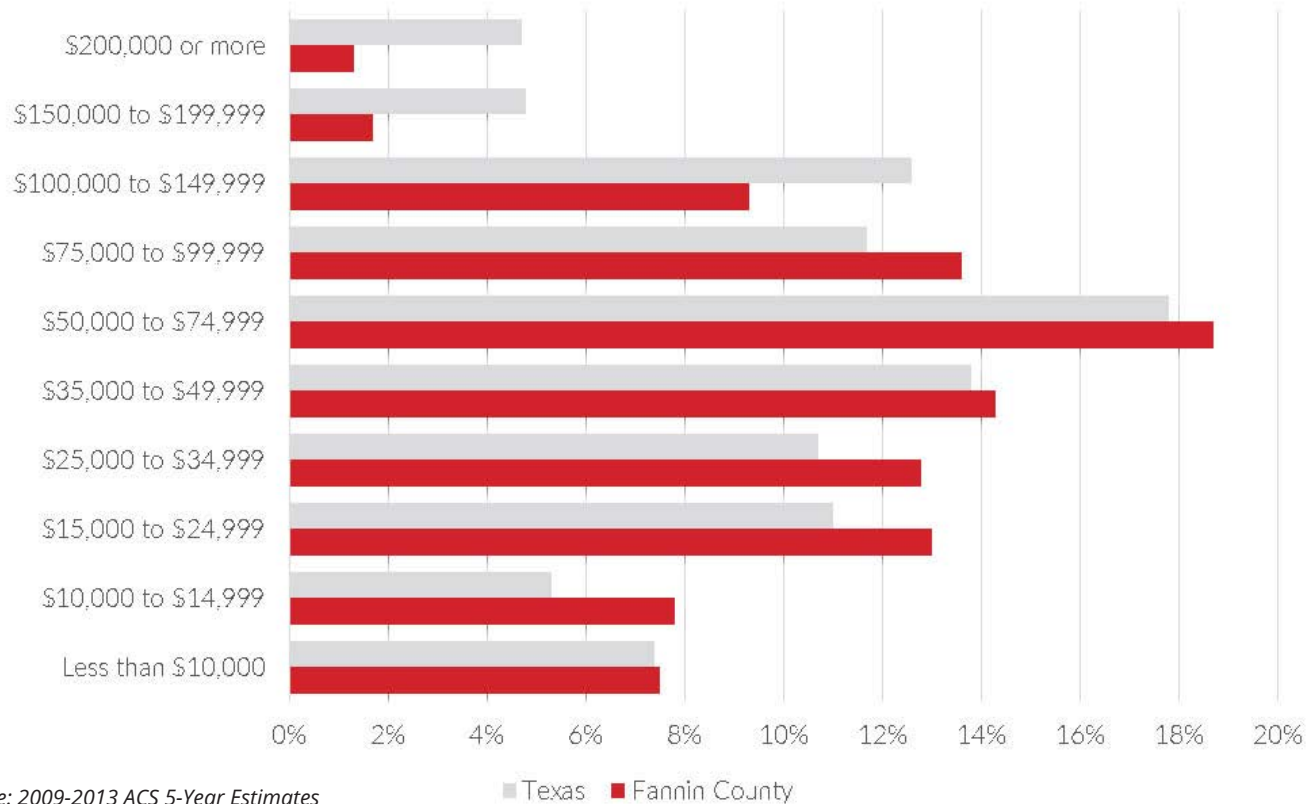
Source: 2009-2013 ACS 5-Year Estimates



## Income Levels

Income can serve as an indicator for the retail market. Higher income levels generally mean more disposable income is available and attracts more retail possibilities, which in turn can translate into a higher tax base. Median household income in Fannin County was \$34,501 in 1999. In 2013, it increased to \$44,355. When compared to the State of Texas, Fannin County has a significantly smaller percentage of households earning \$100,000 or more. The largest income bracket for the County was households earning \$50,000 to \$74,999 per year, followed by households earning \$35,000 to \$49,999 per year. The percentage of families earning less than \$49,999 was greater in Fannin County than the State of Texas - 55.4 percent in Fannin County compared to 48.2 percent for the State.

**Figure 6. Income Levels**



## Housing Type

There are a total of 14,159 housing units in Fannin County. 83 percent of Fannin County’s housing units are occupied, compared to 88 percent for the State. The percentage of vacant housing units is larger for the County when compared to the State—17 percent in the County compared to 12 percent for the State. Of the occupied units, Fannin County has 75 percent owner-occupied, which is a larger percentage than the State average of 63 percent.

**Table 7. Housing Occupancy**

Housing Occupancy	Fannin County	Texas
Total Housing Units	14,159	10,070,703
Occupied housing units	83%	88%
Vacant housing units	17%	12%
Owner-occupied	75%	63%
Renter-occupied	25%	37%
Homeowner vacancy rate	3.9	2
Rental vacancy rate	7.1	9.2
Average household size of owner-occupied unit	2.63	2.93
Average household size of renter-occupied unit	2.62	2.63

Source: 2009-2013 American Community Survey 5-Year Estimates

## Housing Value

Housing values are important to examine because it generally indicates what the community can expect its future housing stock to contribute to the local economy. Table 8 reflects the total housing value for both 2000 and 2013. In 2000, approximately 86 percent of the housing stock was valued below \$99,999. In 2013, that number decreased by almost 30 percent. Meanwhile, housing units above \$100,000 greatly increased, which is an indication that home values are rising. In 2000, the median home value was \$54,500 and by 2013 had increased to \$92,600.

**Table 8. Housing Value**

Housing Value	2000	2013
Owner-occupied units	4,936	8,813
Less than \$50,000	44.9%	23.1%
\$50,000 to \$99,999	40.8%	31.6%
\$100,000 to \$149,999	10.0%	17.7%
\$150,000 to \$199,999	2.8%	13.5%
\$200,000 to \$299,999	1.4%	8.3%
\$300,000 to \$499,999	0.1%	3.8%
\$500,000 to \$999,999	0.1%	1.5%
\$1,000,000 or more	0.0%	0.5%
Median Housing Value	\$54,500	\$92,600

Source: 2000 U.S. Decennial Census, 2009-2013 ACS 5-Year Estimates

## Existing Land Use

Providing for the orderly and efficient use of land is a major planning consideration in the development of the LBCR. The pattern of land use that exists today has seen little variation over the years since the area has remained predominately agricultural or undeveloped. The relationships of existing and future land uses will shape the character and quality of life of the community for many years to come. In order to accurately assess the area's future land use needs, an analysis of present land use patterns is of primary importance. Growth and development occurring around the LBCR in the future will require the conversion of a large amount of vacant open space and agricultural land into developed uses. The relationships of existing and future land uses will have an impact upon the area economically, and will also shape the character and livability of the community in the years to come. A well-planned and orderly land use arrangement can be served more easily and efficiently than a random and scattered association of unrelated uses.

## Land Use Types

In November 2015, aerial photography supported by field verification was used to identify existing land uses to identify land use trends. The information obtained from the survey was color-coded to create Figure 8 to discuss the current land use patterns. The following section provides an overview of the different types of land uses included within the survey.

**Figure 7. Aerial view of the intersection of US 82 and FM 2900**



## Residential Land Use

The following is an overview of land uses that are primarily residential, including single family, two-family, and manufactured homes.

### Single Family

A single dwelling unit that is detached from any other dwelling unit, is built on-site, and is designed to be occupied by only one family. Single family homes are the more prevalent housing type and developed land use type.

### Two-Family

A structure with two attached dwelling units that is designed to be occupied by two families (one in each unit). Two-family units are also commonly referred to as duplex units.

### Manufactured Home

A manufactured home is a single family dwelling unit that is manufactured in a factory rather than on-site.

## Nonresidential Land Use

Nonresidential land uses include areas in which people typically do not reside.

### Commercial

Commercial establishments primarily provide a service to consumers. Examples include hotels, automobile service stations, automobile sales lots, and self-storage businesses.

### Single Family Home



### Manufactured Home



### Commercial Use



## Industrial

Allows for the processing, storage, assembly, and/or repairing of materials. Uses range from light industrial with all activity occurring indoors, to heavy industrial with some activity occurring outside.

## Parks and Open Space

Public or private park land, open space, and/or recreation area that is outside. May include recreational facilities, such as tennis courts, public swimming pools, picnic pavilions, and basketball courts.

## Public/Semi-Public

Uses that are generally accessible to the public, such as schools, churches, public buildings, golf courses, cemeteries, and some medical facilities. Also includes some support services, such as a school bus storage lot.

## Rural

The rural land use designation includes all of the land that is used for agricultural purposes, or vacant land that is currently undeveloped.

## Caddo National Grasslands

The Caddo National Grasslands is comprised of 17,785 acres of open prairie and wooded land. The grassland is administered by the U.S. Forest Service and managed by Texas Parks and Wildlife Department. The grassland is available year round to the public, and provides recreational activities such as bicycling, camping, equestrian activities, fishing, hiking, wildlife viewing, and hunting.

## Public/Semi-Public Use

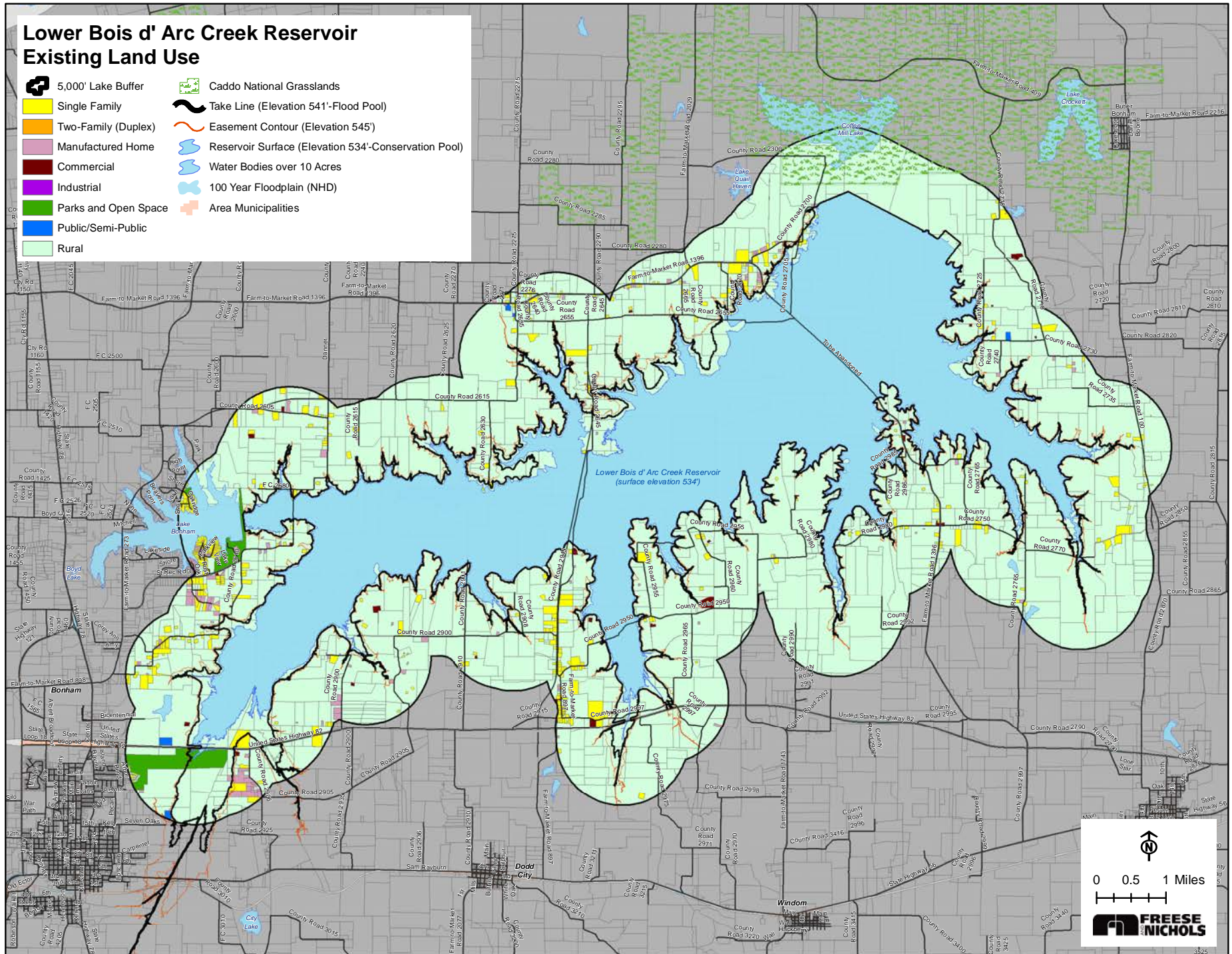


## Rural Land



[This page is intentionally left blank for double-sided printing]

**Figure 8. Existing Land Use Map**



## Physical Constraints to Development

The area's constructed and natural patterns have influenced the shape and growth of the area surrounding the LBCR. Understanding how such features influence and regulate the current development patterns can provide insight into the most appropriate way to develop the area in the future. These patterns are divided into two primary categories: natural constraints that include the geographical aspects of the planning area and constructed constraints that include the features that have been constructed or added to the area. Figure 11 shows the physical factors that influence development around the LBCR.

### Natural Constraints

#### Topography

The topography around LBCR ranges in elevation from 371 feet at the center of the reservoir to approximately 700 feet at the highest point just south of the lake. There are no drastic fluctuations in the topography throughout the planning area, and, therefore, will not pose as a constraint to the development around the reservoir. The area is full of vegetation ranging from open fields to forested areas.

#### Riverby Ranch

Riverby Ranch was a 14,959-acre working cattle ranch that had been significantly overgrazed. As shown in Figure 9, it is located a few miles northeast of the location of LBCR. Water naturally stands on the property, but some drainage improvements have already been made. Taking some simple steps to restore the original hydrology of the ranch can significantly improve the quality of the land. In order to offset the habitat displacement resulting from the creation of the reservoir, Riverby Ranch has been purchased by the NTMWD for mitigation purposes.

#### Littoral Zone Wetlands

Littoral wetlands are areas within the lake where wetland vegetation is expected to grow. As seen in the Physical Constraints to Development Map in Figure 11, these areas lie within the reservoir footprint along the shoreline and streams. The littoral wetlands and contributing streams are included as part of the mitigation for the lake and will have specific development restrictions. Areas designed as part of the LBCR Mitigation Plan will be protected in perpetuity. The easement will include both the water and adjacent shoreline areas. These restrictions have not been formalized, but likely will include restricted shoreline access, including restrictions on boat docks and piers.



### **100-Year Floodplain**

Land that lies within a floodplain is usually difficult and costly to develop. However, floodplains provide opportunities for recreational uses, such as parks and trails. In the planning areas around the lake, there are floodplains leading into the wetland areas that are primarily undeveloped but have sparse developments at a close proximity. Overall, floodplain areas cannot be difficult to develop and have restricted uses.

### **Conservation Pool (Elevation 534 Feet AMSL)**

When the lake is considered 100% full, the water will be at an elevation of 534 feet AMSL.

### **Take Line (Elevation 541 Feet AMSL)**

The take line marks the boundary between private property and the lake. The take line is at an elevation of 541 feet AMSL and marks the 100-year flood pool for the lake.

### **Easement (Elevation 541 Feet AMSL to 545 Feet AMSL)**

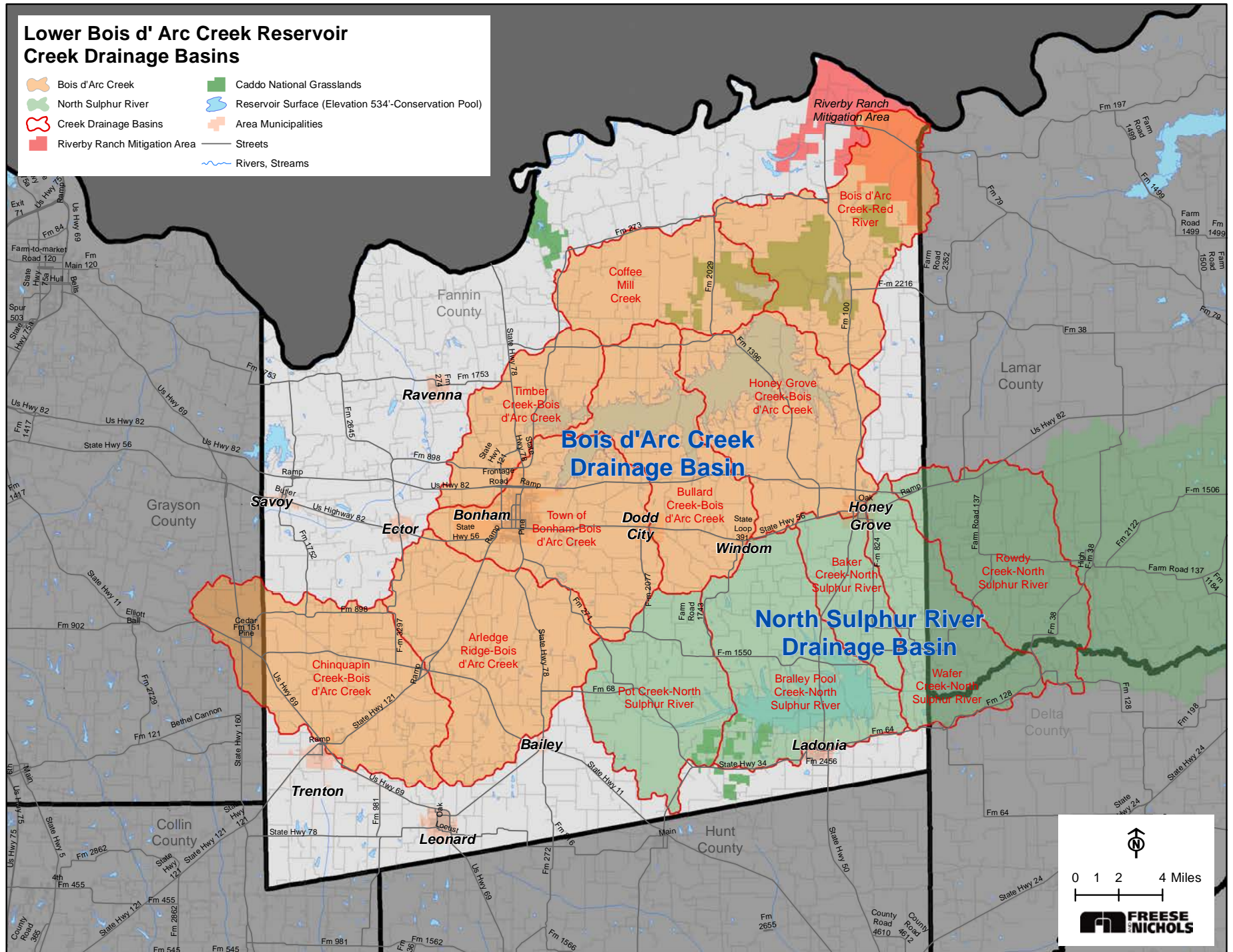
There is an easement on private property between an elevation of 541 feet AMSL and 545 feet AMSL. The NTMWD is the holder of the easement and the easement limits the type of development that can occur within this area.

### **Drainage Basin**

A drainage basin is an area of land in which precipitation flows downhill and into a body of water such as lakes, rivers, and wetlands. It includes both the streams and rivers that convey the water as well as the surface water and water table from which water drains into the channels. There is an imaginary line commonly known as the watershed that separates neighboring drainage basins and establishes into what basin precipitation will flow. As seen in Figure 10, the major drainage basin found in Fannin County is the Bois d'Arc Creek Drainage Basin. The vast majority of the precipitation that occurs within the basin will flow into the LBCR, which is expected to have a drainage area of 327 square miles. The other drainage basin found within the County is North Sulphur River Drainage Basin. The basin is located in the southeastern portion of the County and extends into Delta and Lamar counties.



Figure 10. Drainage Basin Map (with creek basins)



## Constructed Constraints

### Utilities

There are multiple water, gas, and electric utility lines running through the LBCR planning area. These lines will not restrict development, but will make the future development of the area feasible by alleviating the need for constructing water, gas, and electric utility lines in the immediate future.

### Cemeteries

There are currently several cemeteries located within the planning area of the reservoir. Since cemeteries cannot be easily relocated, they will be constraints to development immediately surrounding the cemeteries. Note that some cemeteries will be moved with the construction of the lake.

### Neighboring Municipalities

There are four neighboring municipalities at close proximity to the lake: Bonham, Dodd City, Windom, and Honey Grove. Of the four, Bonham will have the largest effect on the development of the area around the LBCR. Coordination of zoning should be considered for Bonham and the County because of the overlapping zoning boundaries.

## Caddo National Grasslands Wildlife Management Area

The Caddo National Grasslands WMA is a federally owned grassland managed under a cooperative agreement between the US Forest Service and Texas Parks and Wildlife Department. The WMA is split into two units: the 13,360-acre Bois d'Arc Creek Unit that is located northeast of the lake, and the 2,780-acre Ladonia Unit that is located a few miles west of Ladonia. The grasslands offer a variety of recreational opportunities including camping, hunting, hiking, fishing, and wildlife viewing. Part this area overlaps with the 5,000' zoning area. These grasslands are not anticipated to develop and they will remain as Federal parkland.

### Caddo National Grasslands





## Surrounding School Districts

The LBCR will be located within the boundaries of four school districts: Bonham ISD, Sam Rayburn ISD, Honey Grove ISD, and Dodd City ISD. These school districts will benefit from the construction of the LBCR in the form of property tax revenues. It is expected that over \$5 million per year will be generated by area school districts under current law. This gain in school district revenue will not be accompanied by a proportionate increase in student population, because the majority of valuations will be expected to come from weekend and vacation residences. The following provides a description of each of the four school districts.

### Bonham ISD

Bonham ISD will include the western most part of the LBCR. The school district currently has five schools: three elementary schools, one middle school, and one high school. During the 2014-2015 school year, there were a total of 1,903 students enrolled in the school district. The district had 150 teachers during that year, with a total staff of 298. The student to teacher ratio was 13.3:1, meaning that there was an average of 13.3 students for every one teacher.

### Honey Grove ISD

The southeastern portion of the LBCR will lie within the boundaries of this school district. Honey Grove ISD was established in 2001 and home to three schools: an elementary, middle, and high school. Aside from the City of Honey Grove, the district also serves the Town of Windom and extends into a small portion of Lamar County. During the 2014-2015 academic year, there were a total of 610 students

enrolled in the district. There were a total of 106 staff members employed during that year, with 44 of them being teachers. The student to teacher ratio is 13.9:1.

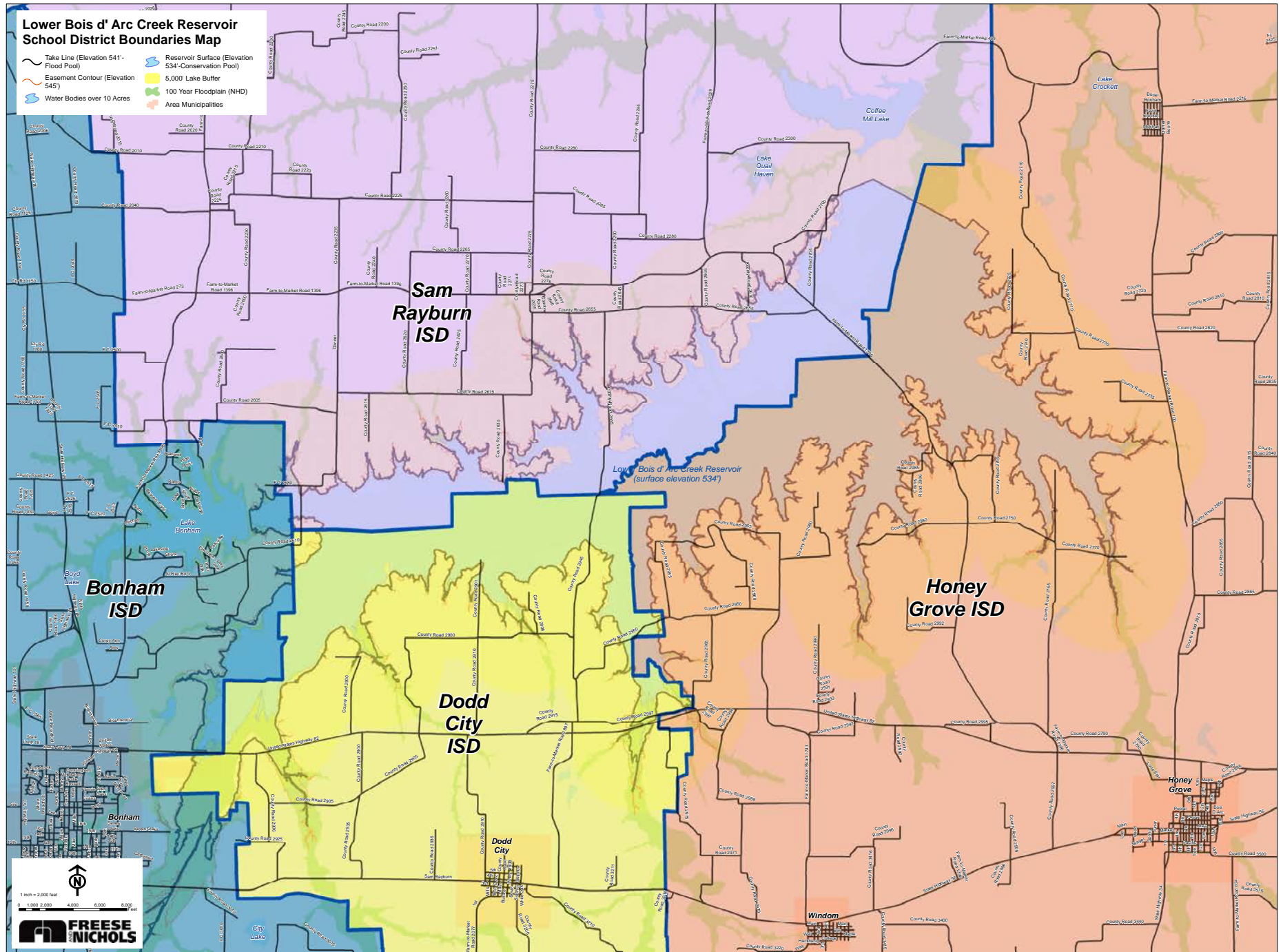
### Sam Rayburn ISD

Sam Rayburn ISD was formed in 1964 by the consolidation of the North Fannin and Telephone school districts. Once the reservoir is completed, the district will have the northern half of the reservoir located within its boundaries. The school district primarily serves the community of Ivanhoe, but also has students from Telephone and Elwood. Schools within the district are widely known within the northeast Texas community as leaders in technology, academics, and athletics. There are only two schools found within the school district - one that holds students from pre-kindergarten to 5th grade, and the other holds students from 6th through 12th grade. There were 488 students enrolled in the 2014-2015 academic year, with a student to teacher ratio of 11.6:1.

### Dodd City ISD

The southwestern portion of the LBCR will lie within the boundaries of Dodd City's school district. Dodd City ISD is the second smallest school district found within Fannin County, with only one school that serves pre-kindergarten through 12th grade. There were 385 students enrolled in the school district during the 2014-2015 school year. That same year, the district employed 63 staff members. The student to teacher ratio is 6.1:1.

**Figure 12. School District Map**



## Summary | Baseline Analysis and Existing Conditions

It is important to note the baseline features including demographics, existing land use, physical constraints, past planning efforts, and the planning context in order to ensure effective planning. Not only does an understanding of these factors paint a picture of Fannin County, but it also allows for sound planning decisions to be made in the future. Fannin County is located in the northeastern part of Texas, a region that is primarily rural. With the population growth that will be happening over the next few decades within the DFW Metroplex, it is expected that the growth will spread outside of DFW and into neighboring regions - in particular Fannin County. Growth is also expected in Fannin County as a result of the construction of the LBCR. This growth will cause the County to greatly change both in demographics as well as land use composition. Having an idea of the County's past, present, and potential future will help ensure that coordinated, informed, and realistic scenarios are ultimately developed for the community.





# Chapter 2

## *Vision and Issue Identification*

**Chapter Purpose:** To document public input and establish a vision for the lake to inform the plan recommendations

### **Introduction**

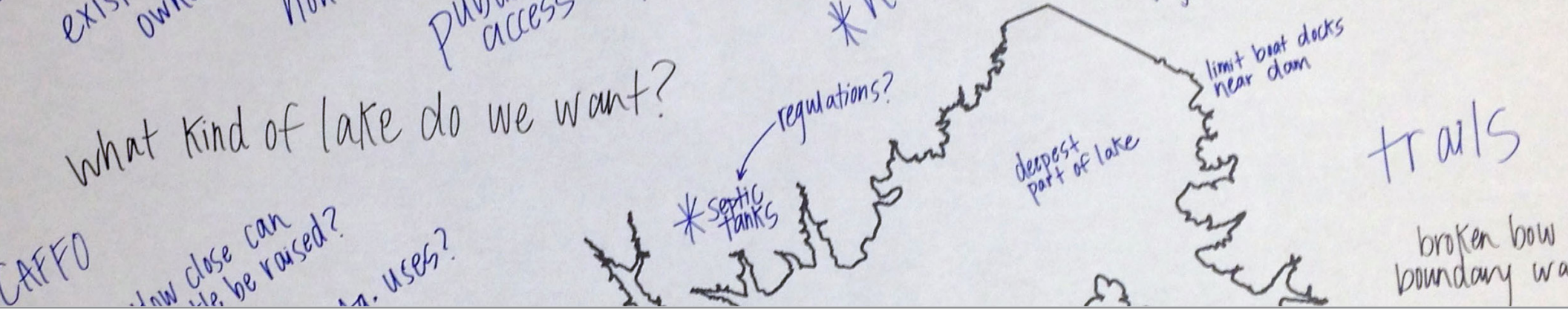
It is important to think about how the area around LBCR will develop in the future. Setting a long-term vision helps to guide the development of a comprehensive plan. At the beginning of the planning process, a vision was set by identifying issues and needs. This vision was developed with the help of the Zoning Commission and public input. This chapter will paint a picture of what the residents of Fannin County desire around the LBCR and will set a basis for the recommendations in this Comprehensive Plan.

Members of the first Zoning Commission in Fannin County and members during the development of this Comprehensive Plan include the following:

- Judge Creta Carter
- Gary Fernandes
- David Johnson
- Dustin Knight
- Bob McCraw

### **Formation and Purpose of the Zoning Commission**

Texas Local Government Code, Subchapter G, Section 231.136 outlines the authority and responsibilities given to the County Zoning Commission. The Commission “shall recommend boundaries for the original zoning districts and appropriate zoning regulations for each district.” The Zoning Commission was formed with the County Judge as the chairperson. Each County Commissioner appointed a Zoning Commission member to make a total five members. The Zoning Commission will hold public hearings to hear rezoning cases for land in the LBCR zoning districts. For the purpose of this Comprehensive Plan, the Zoning Commission was used as a steering committee to help guide the Plan’s formation. According to Texas Local Government Code Section 231.134, zoning ordinances must be developed in accordance with a comprehensive plan. The Zoning Commission’s involvement with the development of the Comprehensive Plan will allow the group to gain a better understanding of the basis for developing the zoning regulations and map for the area around the LBCR.



## Public Input Process

The following meetings were held to aid the development of this Comprehensive Plan by gathering input on the vision for the LBCR. Identifying issues and needs helped form an overall vision for how the LBCR should develop. The following meetings were held as part of the public input process:

- 08/19/2015 | Zoning Commission Meeting #1
- 09/30/2015 | Stakeholder Interviews
- 10/14/2015 | Additional Stakeholder Interviews
- 10/14/2015 | Zoning Commission Meeting #2
- 10/14/2015 | Public Open House #1
- 12/15/2015 | Zoning Commission Meeting #3 (Lake Tour)
- 02/24/2016 | Zoning Commission Meeting #4
- 06/27/2016 | Zoning Commission Meeting #5
- 08/29/2016 | Public Open House #2



Public Open House #1 on 10/14/2015

## Zoning Commission Meeting #1

**Date:** August 19, 2015

**Location:** Fannin County Courthouse

**Attendance:** Zoning Commission members and 50+ public

**Purpose:** To kick-off the project, explain the planning process, and obtain general input about the overall vision for the lake.

**Summary:** The meeting began with a brief overview of the history of the LBCR and why it is needed for Texas water supply and recreational opportunities. This brought up many questions about the LBCR and a representative from the NTMWD was in attendance to answer questions and correct any misinformation. After this, the LBCR Comprehensive Plan and Zoning project was introduced and a brief overview of planning and its importance was given. The role of the Zoning Commission was explained and the members of the Commission were introduced. The rest of the meeting involved asking questions to the Zoning Commission and the public providing their vision for the LBCR. The issues and comments were recorded on a large board that allowed attendees to view the comments after the meeting. Over 50 members of the public were in attendance to watch the meeting. This led to a large amount of public discussion allowing the consultants to gain valuable information on how the public felt about the LBCR. After the presentation and discussion, the members of the Zoning Commission and the public mingled and discussed the future LBCR. The Zoning Commission members, a NTMWD representative, and the consultants were able to answer additional questions from the public by using the maps and boards set up around the room.



### Key Takeaways:

1. There is significant interest in the lake, but confusion on specific details and hydrology
2. Maintaining a rural environment is desired
3. Public access and recreational amenities are necessary
4. Agriculture is very important to the community
5. Commercial uses should be limited

## Stakeholder Interviews

**Date:** September 30, 2015

**Location:** Fannin County Courthouse

**Purpose:** To gain specific input on how the LBCR would affect various public agencies in Fannin County.

**Summary:** In an effort to obtain valuable public input, various public agencies were interviewed. These stakeholders would be affected by the creation of the lake and their feedback is important to the planning process. Representatives from surrounding cities, police and fire departments, and the County were interviewed individually. Each interview started with a brief overview of the planning process and the importance of planning around a future lake. A general set of questions was developed to aid in guiding the discussion.

1. The creation of the lake will influence how people will use the land surrounding it. What should the lake be? How should land around the shoreline be developed? What is your vision for the lake?
2. How might your organization be influenced by lake development?
3. What uses should be promoted and what should be avoided around the lake? What should the lake offer residents and visitors?
4. What lake developments are good examples or bad examples?
5. Do you have any additional comments or ideas regarding the lake? What do you think needs to be considered during the comprehensive planning process?

Overall, each entity was in support of the lake and viewed it as an asset to the County. Each entity agreed that the lake should be well-maintained and unique. Almost every person interviewed mentioned that they did not want to see the LBCR development become like the development of Lake Tawakoni. While Lake Tawakoni has great features, the lack of regulations has allowed undesirable uses to develop. The municipalities interviewed agreed that the construction of the LBCR will help Fannin County and bring economic development to the surrounding cities. Each representative wanted to see that public access to the LBCR was available. The fire and police department's main concern was ease-of-access to all areas of the lake and response times.

### Who was interviewed?

County Commissioners and Representatives from:

- District Attorney's office
- City of Bonham
- City of Honey Grove
- City of Leonard
- Sheriff's Department
- Bonham Police Department

### Key Takeaways:

1. The LBCR should be a unique resource to the County
2. Economic development opportunities are important
3. Public access is necessary
4. Emergency response personnel should be able to access all parts of the LBCR

## Additional Stakeholder Interviews

**Date:** October 14, 2015

**Location:** Fannin County Courthouse

**Purpose:** To gain specific input on how the LBCR would affect various public agencies in Fannin County.

**Summary:** Since all the stakeholder interviews could not be held in one day, additional interviews were held. A representative from Bonham Fire Department was interviewed first, then representatives from all independent school districts in Fannin County were interviewed as a group. The school district interview started with a brief overview of the planning process and why it is important to plan around a future lake. The group had many questions about why the LBCR was needed and other engineering/hydrology related questions. A representative from the NTMWD was in attendance to answer these questions. The main concern of the school district representatives was an equal share for all districts near the lake. They would like for there to be equal commercial and residential opportunities in each school district so that the new tax-base is evenly spread since the LBCR would be in Sam Rayburn ISD, Dodd City ISD, Honey Grove ISD, and Bonham ISD. Another concern was the effect of the abandoned roadways on bus routes. Emergency service concerns were also discussed related to ease-of-access and response time. Access to the north and central portions of the lake are especially important. The representative also raised the concern of the potential of injuries to workers during construction of the dam.

### Who was interviewed?

Representatives from:

- Bonham Fire Dept.
- Bonham ISD
- Dodd City ISD
- Honey Grove ISD
- Sam Rayburn ISD
- Fannindel ISD
- Leonard ISD
- Trenton ISD
- Ector ISD
- Savoy ISD

### Key Takeaways:

1. Residential tax-base is important to the four school districts near the LBCR
2. Ease-of-access and response time is critical to emergency response personnel
3. School buses need to be able to access all residential areas around the LBCR
4. CR 100 is a major bus route and it is narrow with no shoulders, and will need to be addressed to handle future traffic concerns
5. Access to the dam construction is important for emergency response personnel
6. The connections of FM 897 to the north is important
7. Long-term camping facilities are not desired

## Zoning Commission Meeting #2

**Date:** October 14, 2015

**Location:** Fannin County Courthouse

**Attendance:** Zoning Commission members

**Purpose:** To discuss the vision again with the group and reach consensus on the identified issues and needs.

**Summary:** Since the first Zoning Commission meeting was generally filled with input from the public, a second Zoning Commission meeting was needed to hear the specific thoughts from the five members – specifically related to vision and land use. The meeting started by reviewing the purpose of the project and the role of the Zoning Commission. During the meeting, an idea was presented about a lake tour to help the Commission members gain a visual understanding of desirable and undesirable uses. After the lake tour discussion, specific visioning questions were asked and discussed:

1. What types of land uses are needed? What types of land uses should be avoided?
2. Based on the land uses discussed, what types of roads are needed? Which roads need upgrades?
3. What residential standards would help to enhance the lake area? (Lot size, building materials, etc.)
4. What nonresidential areas would help to enhance the lake area?
5. What recreational uses are needed?
6. What type of destination should the lake be?
7. How should the lake connect to the region through trails?

### Key Takeaways:

1. Regional trail connections are important to increase the access to the LBCR
2. All existing uses should be allowed to continue
3. The LBCR will enhance the quality of life
4. It is important to provide opportunities for people to do things at the lake
5. The County should make recommendations for desirable boat dock attributes
6. Standards for retaining walls should be set
7. The LBCR will bring economic development to the County

## Public Open House #1

**Date:** October 14, 2015

**Location:** Fannin County Court-at-Law

**Attendance:** 31 people

**Purpose:** To meet with the public before the development of the Plan to gather input regarding the vision for the LBCR and to identify any issues or needs.

## Presentation

The meeting began with a presentation that included the purpose of the meeting, the project scope and schedule, and a general overview of planning and why it's important. Many of the attendees were at the first Zoning Commission meeting so they were familiar with the planning process and why planning around the LBCR is needed.



## Interactive Survey

After the presentation, polling devices were used to conduct a survey. This survey was used in setting the vision for the LBCR. The following are the questions asked and the responses from the attendees. A total of 31 attendees participated in the survey.

### Q1 | How long have you lived in Fannin County?

- Less than 1 year (3%)
- 2-5 years (14%)
- 6-10 years (10%)
- More than 10 years (66%)
- I don't live in Fannin County (7%)

### Q2 | Out of the following, which statement do you identify with the most? "I desire the lake to be...?"

- As open and rural as possible (43%)
- A regional destination filled with recreation uses (33%)
- Primarily high-end housing (10%)
- A place with resort or commercial uses (14%)





**Q3 | Out of the following, which should be the most important element when planning for the lake?**

Public access (33%)



Homes with docks (30%)



Commercial (0%)



Agriculture (37%)



**Q4 | Out of the following, which residential type is most suitable for the lake area?**

- Homes on large lots – over 5 acres (26%)
- Homes on small lots – less than 5 acres (15%)
- Condos/vacation rentals (4%)
- Mixture of A, B, and C (56%)

**Q5 | How important is the quality (materials/design) of residential development around the lake?**

- Extremely important (69%)
- Somewhat important (14%)
- Not important at all (17%)

**Q6 | Out of the following, which represents the level of standards you want to see for nonresidential uses around the lake?**

(23%)



(14%)



(9%)



(55%)



**Q7 | Should nonresidential buildings be designed around a central theme?**

- Yes (21%)
- No (79%)

**Q8 | Should marinas be allowed around the lake?**

- Yes (43%)
- No (21%)
- Only in certain locations (36%)

**Q9 | Should there be public access areas?**

- Yes (90%)
- No (10%)

**Q10 | Should there be campgrounds?**

- Yes (83%)
- No (17%)

**Q11 | Should there be RV parks?**

- Yes (83%)
- No (17%)

**Q12 | Should there be private recreation and parks?**

- Yes (66%)
- No (34%)

**Q13 | Trails can be an important element to lake development. Which of the following statements do you agree with?**

- Trails should only be in parks and not connected to surrounding development (31%)
- Trails should be developed around the entire lake, where possible (10%)
- Trails should be connected to other parts of the County to create a larger trail network (10%)
- All of the above (38%)
- None of the above (10%)

**Q14 | With increased traffic, do any roads need to be improved?**

- Yes (93%)
- No (7%)

**Q15 | Out of the following, what type of recreation is most important to you?**

Swimming/beach (4%)



Fishing (52%)



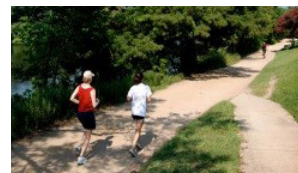
Camping (9%)



Picnic Facilities (4%)



Trails (4%)



Passive recreation (26%)



**Q16 | How should the major roads be designed around the lake?**

- Designed to travel as fast as possible and carry the most traffic (7%)
- Rural, slower speed roads with nice landscaping (59%)
- Road around the lake/shoreline drive (28%)
- I don't have a preference (7%)

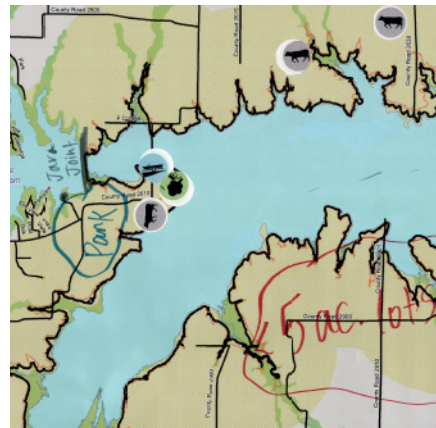
## Breakout Groups

After the presentation and survey, a land use exercise was conducted to allow participants an opportunity give input on where certain uses should or should not be allowed around the LBCR. The participants formed three groups. The groups used a large map to identify the areas that were suitable for each land use by placing the corresponding land use sticker on the map. To complete the exercise, each group presented their map. Overall, the each group's ideas were similar, and the input gathered was used in the formation of the Future Land Use Plan map and this Comprehensive Plan.

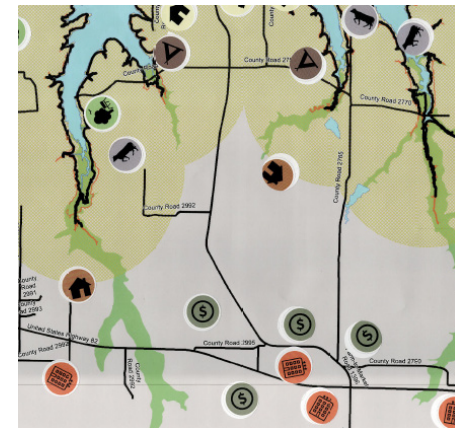
**Group #1** | This group placed a marina and other commercial uses near the southeast shoreline of the lake where FM 1396 will be abandoned. They designated the northern shoreline of the lake for agricultural uses and the southern portion for large and small lot residential. They evenly distributed parks and boat ramps around the lake.



**Group #1**



**Group #2**



**Group #3**

**Group #2** | Similar to group #1, group #2 placed agricultural uses in the northern shoreline of the lake and residential uses in the southern shoreline. Additionally, they specified an area for five-acre residential lots. This group also designated land uses along US 82 and said that this corridor is important because it will be the main gateway to the lake and surrounding area. They added residential, hotels, and commercial uses along the corridor. They also distributed parks and boat ramps around the lake, including a park that would connect Lake Bonham to the LBCR.

**Group #3** | This group distributed agricultural uses all around the LBCR shoreline. Similar to group #2, they paid attention to the US 82 corridor and added hotels and other commercial uses. They only designated residential uses on the southern shoreline of the lake, similar to the other two groups. Parks, boat ramps, and camping sites were distributed around the LBCR shoreline.

## Open House

The last portion of the public meeting was an open house format. It was a time for attendees to have small group conversations with other attendees, the consultants, and the NTMWD staff. In addition, it allowed attendees to walk around the room to look at maps and participate in input boards set up around the room. The following is a summary of the input boards.

### Board #1 | What types of parks and recreation are needed?

- “I would like to see safe, beautiful, parks like Fannin Lake”.
- “Mainly that which supports hunting and fishing with a limited number of campgrounds.”
- “Private control ownership for camp and cabin rental.”
- “Existing roadways that now enter lake to become boat ramps.”

### Board #2 | What is your vision for the lake and surrounding area?

- “I would like to see this as a beautiful project. The lake should be pleasing to the eye, not develop like a cookie cutter lake.”
- “I have a vision for my land that does not include a reservoir.”
- “Lots of residential along lake’s shore.”
- “Boat docks allowed.”
- “Businesses to support rural/recreational lifestyle.”
- “Limited hotels and requirements for hotels to keep them mid to upper range.”
- “Restaurants/bar with patios and water view.”

- “Supply water to the County for economic growth. Keep it rural, quiet, and good for fishing, hunting, and boating.”

### Board #3 | What we have heard so far...

The following statements that were gathered from previous public input were on the board and attendees were asked to put a dot next to each statement they agree with.

(The numbers in parenthesis indicate the number of dot responses.)

- Keep the area clean and nice (15)
- Keep current agricultural uses (12)
- Be a good fishing lake (11)
- Keep the land rural, not a Dallas lake (10)
- Promote tourism/recreational destination (8)
- Promote recreational opportunities for Fannin County residents (7)
- Have hike and bike trails (6)
- No heavy commercial uses (6)
- Need to have public access (6)
- Not like Lake Texoma or Lake Tawakoni (5)
- Have a resort/convention center (2)



## Written Comments

There was a table set up for attendees to write down any comments. This form of public input was to allow those who may not be comfortable speaking at meetings a chance to give their input. Only one written comment was received.

*"I think this is a great opportunity to create a wonderful project. Appreciate your help."*

Cards were also handed out to residents as they left to direct them to the comment section on the project website.



## Key Takeaways:

1. Maintain current agricultural uses, especially on the north side
2. Residential should be primarily on the south side
3. Boat ramps and public access should be appropriately located around the lake
4. Maintain the rural and natural environment
5. Small-scale commercial uses are appropriate along major thoroughfares
6. US 82 will be a main gateway and is important for economic development
7. Opportunities for various house types should be available
8. Parks, trails, and other recreational opportunities are very important
9. Not everyone is happy about the project, but still wants to make sure the natural/rural feeling of the County is protected
10. Connection between Lake Bonham and the LBCR is important – specifically through a park

## Zoning Commission Meeting #3 (Lake Tour)

**Date:** December 15, 2015

**Location:** Lake Tawakoni, Lake Fork, and Jim Chapman Lake

**Attendance:** Zoning Commission members and two representatives from NTMWD

**Purpose:** To tour nearby lakes to gain a visual understanding of desirable and undesirable development.

**Summary:** The Zoning Commission created the idea of touring nearby lakes to gain a visual understanding of desirable and undesirable development. The lake tour started at Lake Tawakoni in southern Hunt County, then went to Lake Fork in western Wood County, and ended at Jim Chapman Lake in northern Hopkins County. The group viewed different types of boat docks and agreed that boat docks around the LBCR should be open-air and have a pitched roof. The group toured residential areas to see what different types of lot setbacks looked like and saw different types of commercial development. They also saw boat ramps, parks, and camping/RV sites. Overall, the lake tour helped the Zoning Commission to visualize various lake concepts and elements, which will help them in the formation of the zoning regulations. The following is information about the lakes that were toured by the Zoning Commission and pictures from the lake tour.

### Lake Tawakoni

- Surface area: 37,000 acres
- Storage capacity: 872,000 acre feet
- Elevation: 437.5 (Conservation Pool)
- Owner: Sabine River Authority of Texas

### Lake Fork

- Surface area: 27,000 acres
- Storage capacity: 637,000 acre feet
- Elevation: 403.0 (Conservation Pool)
- Owner: Sabine River Authority of Texas

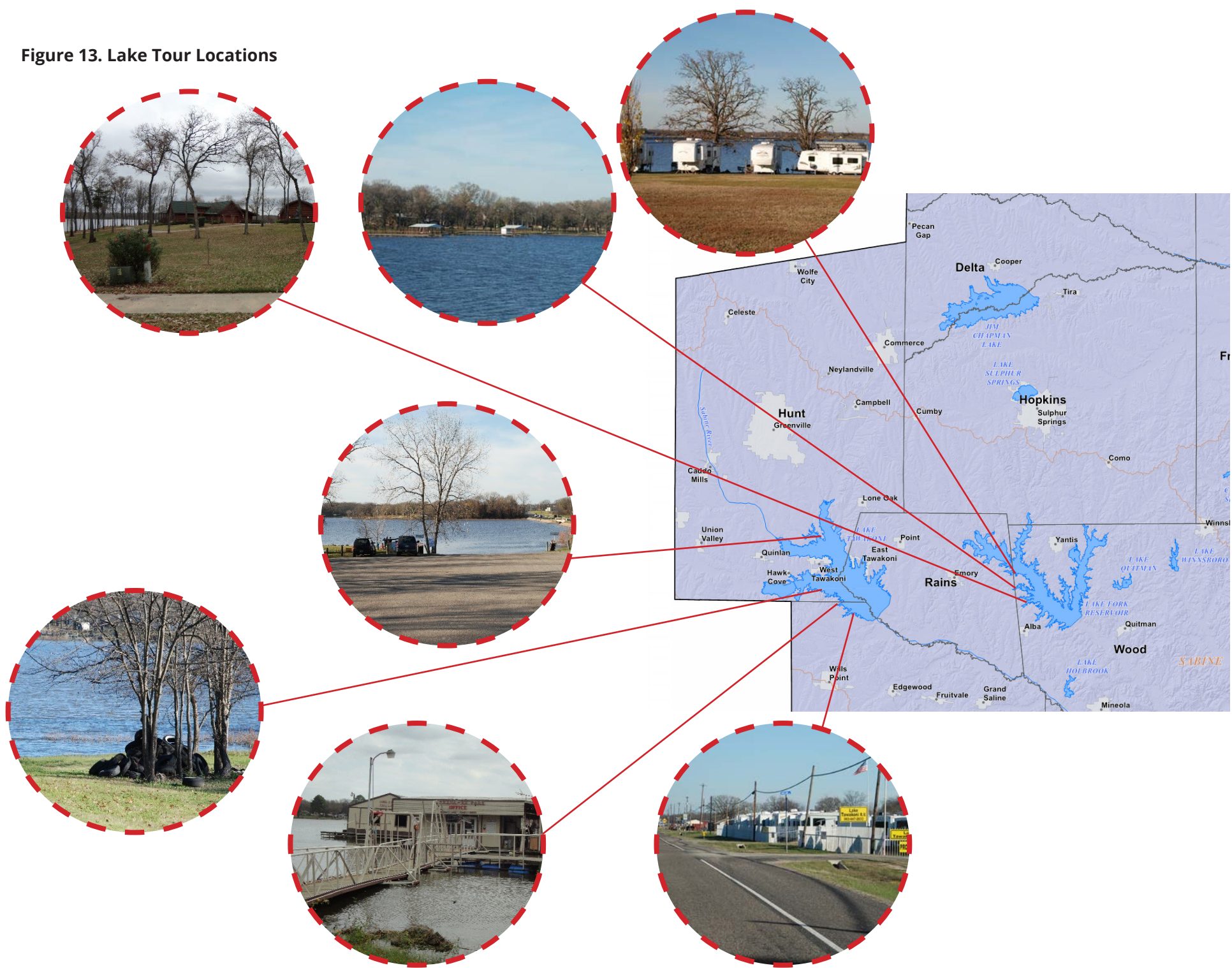
### Jim Chapman Lake (formerly known as Cooper Lake)

- Surface area: 18,000 acres
- Storage capacity: 299,000 acre feet
- Elevation: 440.0 (Conservation Pool)
- Owner: US Army Corps of Engineers

#### Key Takeaways:

1. Quality development is critical to protecting the natural environment of the LBCR
2. Boat docks should have design standards, like pitched roofs
3. It is important to create a plan and zoning regulations before development occurs
4. The visual appearance of buildings, signs, dumpsters, and landscaping is important
5. RV parks should have quality standards such as paved roads and required maintenance, and should also be for short-term use only

Figure 13. Lake Tour Locations



## Zoning Commission Meeting #4

**Date:** February 24, 2016

**Location:** Fannin County Courthouse

**Attendance:** Zoning Commissioner members

**Purpose:** To present the first draft Plan to the public and obtain feedback.

**Summary:** The Zoning Commission members met to review the first draft of the Comprehensive Plan. The members asked questions and agreed on edits to the plan. The edits included more information about lake levels, updates to the Future Land Use Plan designations, building materials, clarification on Concentrated Animal Feeding Operations (CAFOs), minimum house size, planned developments, and general formatting edits. The Zoning Commission agreed to review the plan a second time once all edits had been incorporated.



## Zoning Commission Meeting #5

**Date:** June 27, 2016

**Location:** Fannin County Courthouse

**Attendance:** Zoning Commission members

**Purpose:** To present the second draft Plan to the public and gain consensus.

**Summary:** The Zoning Commission members met to review the second draft of the Comprehensive Plan. The members were satisfied with the plan and gave approval for the plan to be presented to the Commissioner's Court and to be posted online for public review.





## Public Open House #2

**Date:** Monday, August 29, 2016

**Location:** Fannin County Court-at-Law

**Attendance:** Approximately 60 people

**Purpose:** To present the draft Plan to the public and obtain feedback.

### Presentation and Discussion

The consultant gave a presentation summarizing the entire Comprehensive Plan. The main themes and recommendations from each chapter were reviewed. After the presentation, members of the audience were given the chance to ask questions. Many of the questions were related to tax exemptions, water levels, and general lake operations.

### Input Boards and Comment Cards

After the presentation and discussion, the public was given the opportunity to submit their thoughts through input boards or comment cards. Each board was related to a chapter in the Plan. The consultants were at each board to answer questions. The public did not submit any input on the boards, but used the boards to examine the maps and ask additional questions. Three comment cards were also submitted.

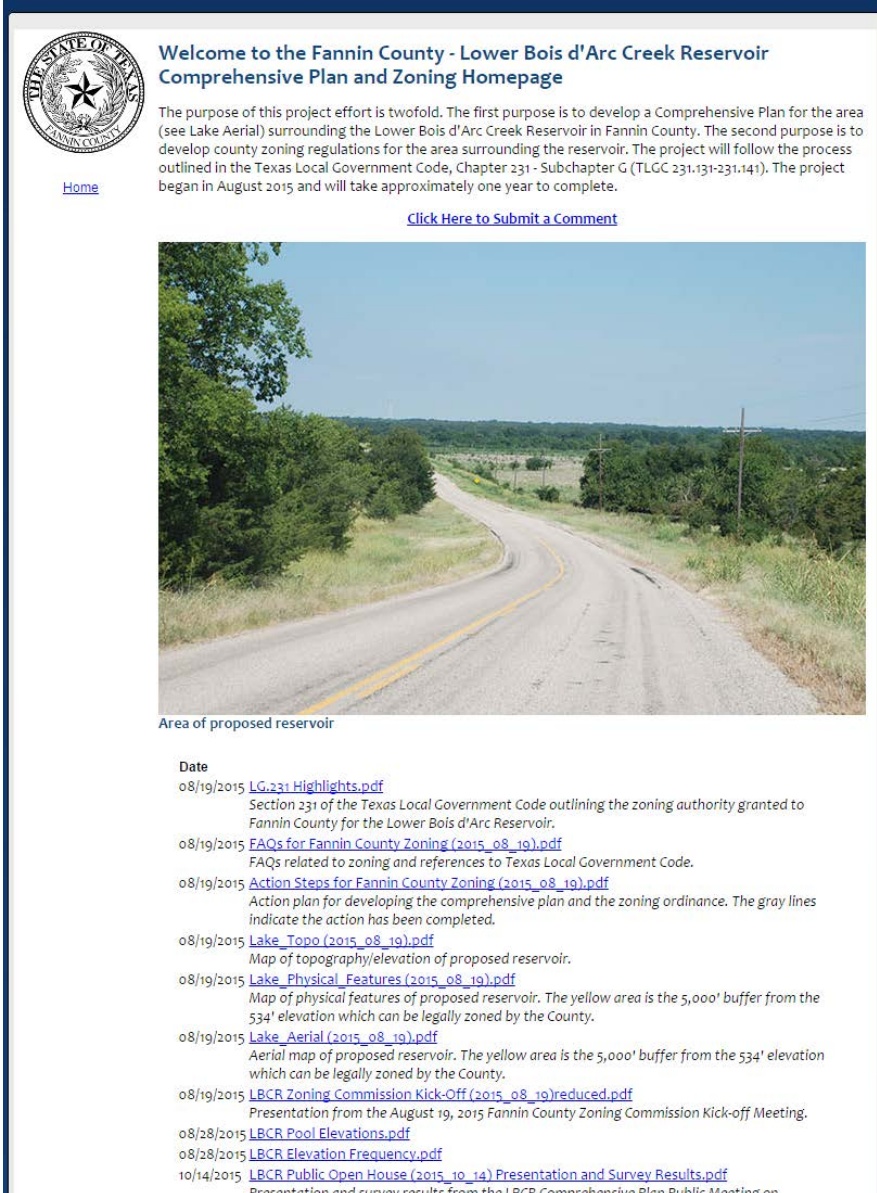


## Project Website

A project website was created to increase the public's access to information about the project. The website contains documents, agendas, and presentations from all meetings. It also contains a feature that allows the public to submit input about the project. The comments that were submitted through the website can be found in the appendix of this plan.

### Key Takeaways:

1. Property value is important to residents
2. Not everyone likes the idea of strategic planning
3. Some residents desire boat docks and boat ramps
4. Some residents are thinking about long-term investments in parks and connections




**Welcome to the Fannin County - Lower Bois d'Arc Creek Reservoir Comprehensive Plan and Zoning Homepage**

The purpose of this project effort is twofold. The first purpose is to develop a Comprehensive Plan for the area (see Lake Aerial) surrounding the Lower Bois d'Arc Creek Reservoir in Fannin County. The second purpose is to develop county zoning regulations for the area surrounding the reservoir. The project will follow the process outlined in the Texas Local Government Code, Chapter 231 - Subchapter G (TLGC 231.131-231.141). The project began in August 2015 and will take approximately one year to complete.

[Home](#)

[Click Here to Submit a Comment](#)



Area of proposed reservoir

Date	
08/19/2015	<a href="#">LG.231 Highlights.pdf</a> Section 231 of the Texas Local Government Code outlining the zoning authority granted to Fannin County for the Lower Bois d'Arc Reservoir.
08/19/2015	<a href="#">FAQs for Fannin County Zoning (2015_08_19).pdf</a> FAQs related to zoning and references to Texas Local Government Code.
08/19/2015	<a href="#">Action Steps for Fannin County Zoning (2015_08_19).pdf</a> Action plan for developing the comprehensive plan and the zoning ordinance. The gray lines indicate the action has been completed.
08/19/2015	<a href="#">Lake_Topo (2015_08_19).pdf</a> Map of topography/elevation of proposed reservoir.
08/19/2015	<a href="#">Lake_Physical_Features (2015_08_19).pdf</a> Map of physical features of proposed reservoir. The yellow area is the 5,000' buffer from the 534' elevation which can be legally zoned by the County.
08/19/2015	<a href="#">Lake_Aerial (2015_08_19).pdf</a> Aerial map of proposed reservoir. The yellow area is the 5,000' buffer from the 534' elevation which can be legally zoned by the County.
08/19/2015	<a href="#">LBCR Zoning Commission Kick-Off (2015_08_19)reduced.pdf</a> Presentation from the August 19, 2015 Fannin County Zoning Commission Kick-off Meeting.
08/28/2015	<a href="#">LBCR Pool Elevations.pdf</a>
08/28/2015	<a href="#">LBCR Elevation Frequency.pdf</a>
10/14/2015	<a href="#">LBCR Public Open House (2015_10_14) Presentation and Survey Results.pdf</a> Presentation and survey results from the LBCR Comprehensive Plan Public Meeting on

[This page is intentionally left blank for double-sided printing]

The image features a landscape background with a red overlay. The text is white and positioned on the right side of the red area. A white vertical line is located to the right of the text.

**The Lower  
Bois d'Arc  
Creek  
Reservoir is  
envisioned as...**

## A NATURAL RESOURCE



## A DESTINATION



## A PLACE FOR RECREATION



## AN ASSET FOR THE COUNTY



# Summary | Vision

Overall, people are in support of the LBCR and want to see it flourish as a unique, natural resource for Fannin County. Even those who do not support the construction of the lake generally still understand the need for strategic planning to protect the land and prevent undesirable development. The following are the major themes that emerged during the public engagement process and were used to craft the vision for the LBCR.

## Major Themes:

1. The LBCR should be a unique resource to the County
2. Economic development opportunities are important
3. Public access and recreational amenities are necessary
4. Agriculture and maintaining a rural environment is very important to the community
5. Commercial uses should be limited
6. Quality development is critical to protecting the natural environment of the LBCR
7. Residential options near the lake are desired
8. Some residents are upset about the lake being built, but still want to make sure the natural/rural feeling of the County is protected
9. Residential tax-base is important to the County, as well as the four school districts near the LBCR
10. Ease-of-access and response time is critical to emergency response personnel



# Chapter 3

## *Future Land Use Plan*

**Chapter Purpose:** To ensure quality residential and nonresidential uses around the lake

### **Introduction**

An important part of this Comprehensive Plan is establishing the ideal Future Land Use Plan for the area. The Future Land Use Plan and Map portray the overall framework of desired land uses surrounding the Lower Bois d'Arc Creek Reservoir (LBCR). Specifically, the Future Land Use Plan designates various areas within the reservoir's planning area for particular land uses, based principally on the specific land use policies outlined herein.

The Future Land Use Map, shown in Figure 14, is graphically depicted for use during zoning and development plan review process. It is important to note that the Future Land Use Map is not a zoning map, which legally regulates specific development requirements on individual parcels. Rather, the zoning map, which will be created once the Comprehensive Plan is completed, should be guided by the graphic depiction of the preferred long-range development pattern as shown on the Future Land Use Map.







## Future Land Use Categories

This section of the Future Land Use Plan provides an in depth description of each recommended land use type as shown in Figure 14. This section also provides recommendations as to the development of each land use type to provide some guidance for the creation of the Zoning Ordinance. The Future Land Use categories are:

- Agriculture/Open Space
- Large Lot Residential
- Small Lot Residential
- Nonresidential

## How Does Future Land Use Relate to Zoning?

The future land use plan informs the zoning ordinance by providing a framework for where land uses are suitable around the lake. It is recommended that all the land around the lake be initially zoned agricultural/open space to accommodate the existing uses. It would be impractical to zone all the land around the lake to match the future land use plan because the dam has yet to be constructed and the market cannot be accurately predicted. There are two ways the County can rezone the land -- reactive and proactive. The reactive way is when new uses are being planned by residents and developers they will submit a rezoning request to the zoning commission. The zoning commission will then review the request and use this comprehensive plan and future land use plan as a guide to determine if the rezoning is appropriate. The proactive way is to slowly rezone pieces of land before development happens. This should not be done all at once, but instead should be done after the dam is constructed and the lake starts to fill in. These gradual rezonings could help to attract certain types of development to particular locations.

## Agriculture/Open Space

### Vision

Land with the designation of agriculture/open space is envisioned to take up the majority of the planning area surrounding the LBCR. This land use type will prevent overdevelopment from occurring as well as protect the water quality found in the region. The land use category is intended to support the continuing operation of an important part of the agricultural related businesses found in Fannin County. The designation includes land that is used for active farming or ranching, hunting, fishing, open space, and agricultural operations. It is important to note that Texas Parks and Wildlife Department regulates all hunting and fishing in Texas. Although the land should primarily be used for agricultural uses or left as open space, it is also appropriate for large lot residential developments to be found within this land use.

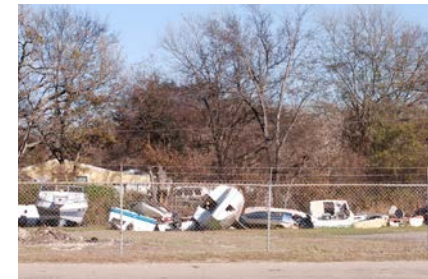
### Recommendations

Concentrated animal feeding operations (CAFOs) should not be allowed within this land use category. CAFOs are agricultural facilities in which animals are kept and raised in confined areas and whose waste is discharged into the water supply. Prohibiting CAFOs within the LBCR will ensure that there is a high level of water quality.

### Desirable



### Undesirable



### What is a Concentrated Animal Feeding Operation (CAFO)?

In Texas, CAFOs are regulated by the Texas Commission on Environmental Quality. They are defined as “lots or other facilities, other than an aquatic animal production facility, where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and in which the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season over any portion of the lot or facility.” *Source: Texas Commission on Environmental Quality*

## Large Lot Residential

### Vision

This land use is indicative of single family homes located on large properties in an effort to maintain the rural character of the area.

### Recommendations

All new developments should have lots greater than one acre in size to provide for a rural lifestyle. Lots should have 100' of frontage to prevent homes from being densely packed along the roadway, resulting in a more densely developed area. Limits on impervious coverage should be set at 40%. Homes should have a front yard and rear yard setback of at least 80' from the property line. This will prevent homes from encroaching on the road and the lake. Homes should have a 25' side yard setback to ensure ample amount of spacing between homes. Having side yard setbacks will prevent homes from being clustered too close to one another. All large lot developments should have paved roads that are at least 28' in width with a 60' right-of-way. The roadways should have two driving lanes each with a width of 12', as well as 2' shoulders on each side. This will ensure that mobility throughout large lot residential areas is easily accessible not only for the residents but also for emergency vehicles. Water will be obtained either from a well or from a provider. Wastewater will be collected by community wastewater collection systems for new subdivisions. On-site sewage facilities are allowed at locations where community wastewater systems are not feasible, provided they protect water quality and meet the requirements of Subchapter D, Chapter 285 of the Title 30 Texas Administrative Code.

### Desirable



### Undesirable



## **Small Lot Residential**

### **Vision**

Small lot residential land use is representative of traditional, single family dwelling units found on half-acre lots. Quality construction should be utilized in all small lot neighborhoods to ensure long-term structural durability as well as to preserve the long term visual integrity of the LBCR area. Quality building materials and landscaping should be encouraged. It is envisioned that HOAs would develop to create and maintain community amenities.

### **Recommendations**

The average lot size in these developments should be 30,000 sq. ft. or about two-thirds of an acre. This will allow for smaller lots that still maintain the look and feel of the rural setting. Lots should be required to have a 100' frontage with a 200' depth to ensure that lots are all of a similar shape and avoid the creation of flag lots. Limits on impervious coverage should be set at 40%. Homes should have both a front yard and rear yard setback of 40' to ensure that homes are not being constructed either too close to the roadway or too close to neighboring homes to the rear. This will make the small lot areas look cohesive. Homes located within these neighborhoods should have a minimum dwelling area of 1,800 square feet. Having a minimum dwelling area for homes ensures that the area surrounding LBCR is developed with large, high quality homes. Similar to large lot developments, small lot residential developments should also have paved roads that are at least 28' in width and a 60' right-of-way.

The roadways should have two 12' undivided driving lanes and 2' shoulders on either side. This will ensure that mobility throughout large lot residential areas is easily accessible not only for the residents but also for emergency vehicles.

### **Desirable**



### **Undesirable**



## Office/Retail/Commercial

### Vision

Nonresidential uses will be primarily located along major thoroughfares and will be limited throughout the planning area. Nonresidential uses should be constructed to a high quality to ensure that they are visually appealing as well as to prolong the longevity of the structure. Generally, nonresidential uses should include restaurants, hotels, small shops, and marinas. Marinas and public access areas will provide visitors of LBCR with great opportunities for boating activities. Marinas are harbors in which privately owned boats are kept, while public access points are locations in which boat ramps will be located to allow LBCR visitors to enter and exit the lake.

### Recommendations

Marinas should be the primary nonresidential use around the lake. There are three potential marina locations identified in Figure 22 in Chapter 5. Public access areas should be provided at multiple prime locations surrounding the LBCR. This will ensure that visitors of the lake are provided with the best possible access to the water. Nonresidential uses should also have a minimum lot size of one acre. The front yard setback requirement should be 80'. Nonresidential uses near the lake should consider the amount of parking needed to accommodate large trucks and boat trailers.

Desirable



Undesirable



## NTMWD-Owned Property

### Vision

The vision for this land use type is to support the operation of the lake as a reservoir and recreational area. Land with this designation is currently owned by the NTMWD. Its purpose is to allow for safe and efficient reservoir operations.

### Recommendation

As its primary function, this land use should be used to support the operation of the reservoir, which includes offices, buildings, infrastructure, and any other uses needed for the lake to function as a reservoir. It is anticipated that some of the areas will remain undeveloped in the immediate future, but may develop over time as residential subdivisions are constructed. As a secondary function, some of the properties within this land use category could be used as recreational opportunities. Notably, site evaluation is necessary to determine if land is suitable for recreational needs and to ensure that the primary function – supporting reservoir operations – is not compromised in any fashion. To the extent property currently owned by the NTMWD is determined unnecessary for reservoir operation following the construction of LBCR, such property may be sold and converted to some other use that is consistent with adjacent land uses and the Comprehensive Plan. The Comprehensive Plan would then be revised to reflect this change in use.

### Desirable



### Undesirable



## ● Recreational Areas

### Vision

Recreational areas are envisioned to provide both passive and active recreational opportunities to the visitors of the LBCR. There are locations shown on the Future Land Use Map (others may be added in the future) that are designated as appropriate for park lands. Areas that are designated as recreational areas will help ensure that land is protected from development, protects water quality, and enhances the area's natural beauty. Further site evaluations are needed to be certain that these areas are suitable for recreational areas.

### Recommendations

Recreational areas are identified in Figure 14 and Figure 24. These areas should be developed to provide a superior recreation system for residents and create a regional destination for tourists. The implementation of these areas will require strategic partnerships with various entities in Fannin County. All recreational areas should be well maintained and designed to protect the natural environment of Fannin County. Generally, recreational areas should be developed adjacent to the lake, in areas that have proposed boat docks, near marinas, and near areas where major thoroughfares are located.

Desirable



Undesirable



## Multi-Family

This future land use category is not shown on the future land use map because multi-family developments require a large amount of infrastructure and it is unrealistic to determine a specific location for this type of development at this time. If a developer decides to build apartments around the lake, they could use the PD process to rezone their land to a PD to allow for multi-family development to occur. This PD district will be a practical way for the zoning commission to approve multi-family developments while still have control over the design and other elements. It is recommended that when development proposals for multi-family are approved by the zoning commission, the Future Land Use Map be updated to reflect the location.

### What is a PD?

A planned development (PD) is a unique zoning tool to assist in implementing the vision and policies of the comprehensive plan. It allows the Commissioner's Court to see development proposals and work with the property owner to ensure development is consistent with the vision of the comprehensive plan.

### How will PDs be used in Fannin County?

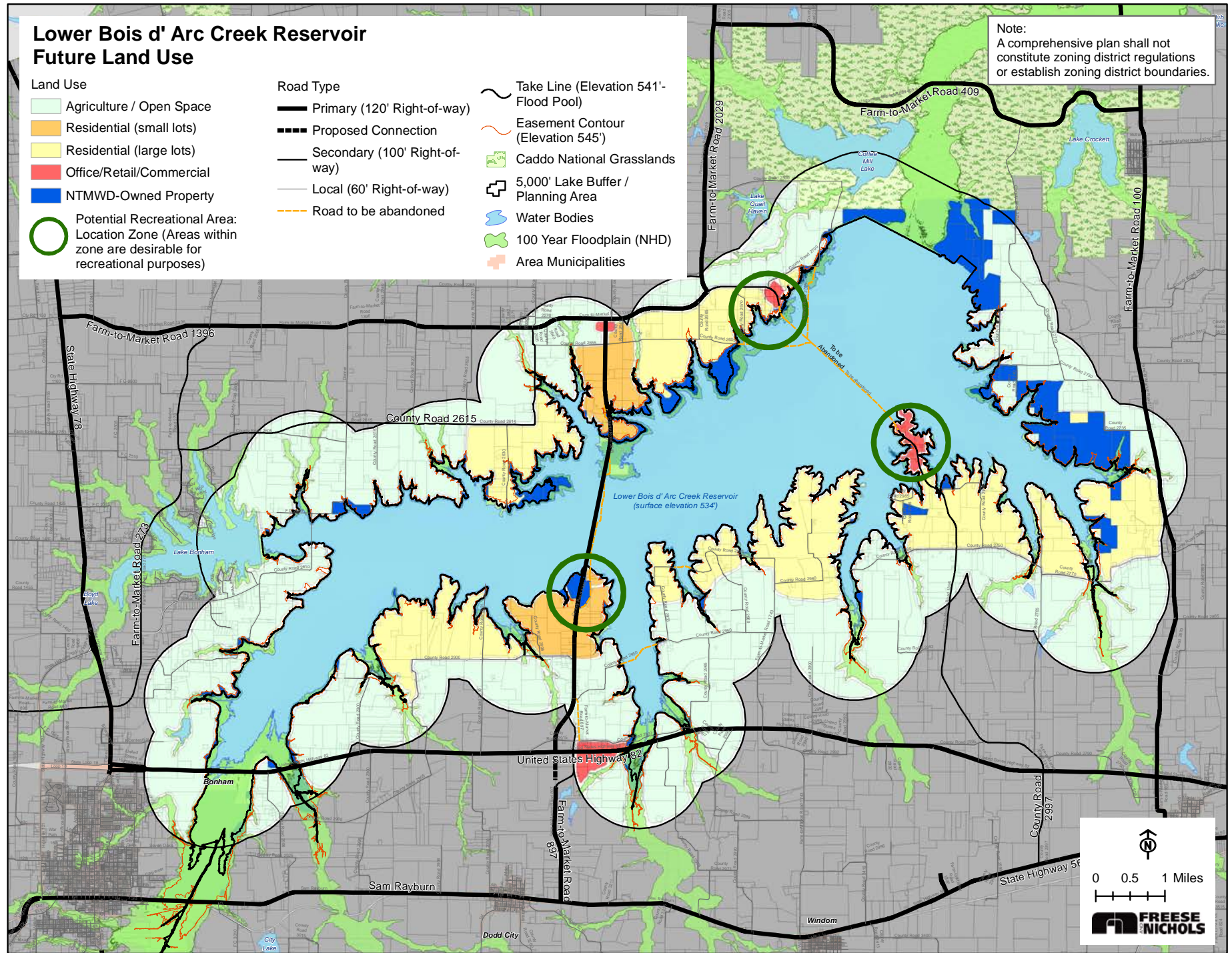
When a property owner wants to develop their property with a different use than what is on the future land use plan and the zoning map, one option is to apply for a PD. The property owner can work with the County to agree on requirements such as building materials and landscaping. This allows for flexibility in implementing the comprehensive plan and ensures that quality development is occurring around the lake. It is anticipated that multi-family development will occur around the lake under the PD process.

It is anticipated that multi-family development will occur around the lake under the PD process





**Figure 14. Future Land Use Map**



## Residential Design Recommendations

### Connections to Adjacent Uses

As new residential developments begin to appear around the LBCR, it is important to consider the future connections that will be needed to adjacent neighborhoods and any nonresidential development. Doing so will improve the circulation throughout the neighborhoods as well as provide easy access for school buses and emergency vehicles. To avoid future connection issues, subdivisions should be required to have at least one street stub-out into currently undeveloped tracts of land. This will allow for new subdivisions to create roads that are a continuation of an existing street.



### Plan for Trail Connections

The LBCR area is envisioned to be predominately rural with recreational areas located throughout. There should be trails located in certain areas around the reservoir in order to provide access to open space, parks, and other facilities to help link various areas of the community to one another. The development of the trail system will be the responsibility of the County. It is important that trail connections are implemented as development occurs, in particular residential development. This can be done in the form of establishing sidewalks or paths that run through residential areas to create small trails within the subdivisions that can later be incorporated into the larger trail network. Trail connections can also be created by providing oversized shoulders on roads.



## Building Materials

To promote a rural character around the lake, the required building materials should be less stringent while still promoting quality development. Wood/log, metal, brick, and stone/masonry building materials should be required. Additional details and requirements for each building material should be incorporated into the zoning ordinance.

## Manufactured Homes

There are two types of manufactured homes: manufactured (HUD code) homes and industrialized (modular) homes. The primary difference is that manufactured homes are constructed to the Federal HUD code standards and modular homes are constructed to the same State of Texas codes as site built houses. According to State law, municipalities may not differentiate between modular homes and site built homes. Modular homes become a part of the real property once installed and must be installed on a permanent foundation system. Manufactured homes should be allowed in residential areas around the lake as long as they conform to the building material standards that are outlined in the zoning ordinance. To promote quality development, industrialized homes should be encouraged over manufactured homes.



## Industrialized Housing

*(Per Section 1202.002 of the State of Texas Occupations Code, as may be amended)*

- a. Industrialized housing is a residential structure that is:
  - i. designed for the occupancy of one or more families;
  - ii. constructed in one or more modules or constructed using one or more modular components built at a location other than the permanent site; and
  - iii. designed to be used as a permanent residential structure when the module or the modular component is transported to the permanent site and erected or installed on a permanent foundation system.
- b. Industrialized housing includes the structure's plumbing, heating, air conditioning, and electrical systems.
- c. Industrialized housing does not include:
  - i. a residential structure that exceeds three stories or 49 feet in height;
  - ii. housing constructed of a sectional or panelized system that does not use a modular component; or
  - iii. a ready-built home constructed in a manner in which the entire living area is contained in a single unit or section at a temporary location for the purpose of selling and moving the home to another location.

## Manufactured Housing

*(Per Section 1201.003 of the State of Texas Occupations Code, as may be amended)*

- a. Manufactured Home – HUD Code
  - i. means a structure:
    - 1. constructed on or after June 15, 1976, according to the rules of the United States Department of Housing and Urban Development;
    - 2. built on a permanent chassis;
    - 3. designed for use as a dwelling with or without a permanent foundation when the structure is connected to the required utilities;
    - 4. transportable in one or more sections; and
    - 5. in the traveling mode, at least eight body feet in width or at least 40 body feet in length or, when erected on site, at least 320 square feet;
  - ii. includes the plumbing, heating, air conditioning, and electrical systems of the home; and
  - iii. does not include a recreational vehicle as defined by 24 C.F.R. Section 82.8(g).

## Nonresidential Design Recommendations

### Building Facades

Building material regulations in nonresidential areas are important to enhance the aesthetic value of the community and to establish a cohesive look. Businesses should use high quality materials on the front façade of their buildings. The use of metal façades should not be promoted.

### Building Articulation

Building articulation refers to offsets of the outer walls or roof line of a building. A perfectly flat wall with no variations has no articulation, and therefore provides no architectural character to a building. Within the nonresidential areas of LBCR, businesses should incorporate articulation to the front façade of the buildings to enhance the architectural quality of the area.

### Refuse Containers

The placement of trash and recycling receptacles is often an overlooked component of site design. They are often placed, unintentionally, in highly visible locations. Receptacles, however, do not have to be unsightly or reduce the visual quality of nonresidential developments. To ensure refuse containers do not become eyesores, they should be screened from public view or located behind the main structure. This can be done with a variety of materials such as masonry walls or landscaping.

### Outside Storage

Outside storage areas are generally defined as areas where goods and materials are displayed or stored outside a building for periods that are longer than 24 hours on a permanent basis. Examples include pre-fabricated storage sheds, commercial equipment, landscaping material storage, and some agricultural uses. To avoid unappealing views, new businesses should be required to locate outside storage in areas not visible to public view. Screening with masonry walls or fences are useful methods. This should be required of all outside storage except for those serving agricultural uses. Materials being stored should not exceed the height of the screening.



## Business Signage

Signage establishes an identity to buildings, businesses, and developments. As one of the most visible elements in a streetscape or corridor, signs significantly influence the visual environment. As development occurs, special consideration should be given to the types of permitted signage. Monument signs should be predominately used since they are visually appealing and do not create clutter along roadways. Attached signs would also be acceptable since they are of a smaller scale and can be easily attached to small shops or boutiques. Detached signage should have a height restriction that does not allow for billboards to be placed along roadways.

## Wayfinding Signage

Wayfinding signs are aimed at providing guidance to specific locations or features of an area. Wayfinding signs may be used to direct vehicular traffic to parks and boat ramps located around the LBCR. They may also be used to help pedestrians or bicyclists identify public facilities, parks, public access areas, trails, marinas and other areas of interest within the LBCR. Acceptable types of wayfinding signs may be pole mounted, part of a monument sign, attached to traffic signal poles, or attached to light poles.



## Recreational Vehicle (RV) Parks and Camping Areas

The area surrounding the LBCR is envisioned to include recreational opportunities. Therefore, it is recommended that the County develop standards for future recreational vehicle (RV) parks and camping areas. These RV parks and camping areas will be allowed to be located within the nonresidential areas since they fall within the commercial category. The following standards are recommended to be applied to all RV parks and camping areas surrounding LBCR.

### Park Area

The minimum area of RV parks and camping areas should be 3 acres.

### Rental Space Size

A minimum rental space of 1,500 square feet should be required for all individual sites (including concrete pad and open space). There should not be a minimum square footage requirement for tent sites or building sizes. Rental cabins tend to be small since most time is spent outside of the cabin utilizing the recreational areas.

### Rental Pads

A minimum of 80 percent of all spaces should be equipped with a surfaced area that has a minimum area of 10 feet by 40 feet. These areas should have water, sewer, and electricity hookups available. Surfacing should consist of concrete or asphalt, unless otherwise approved by the County. Other alternatives are pervious pavement or reinforced grass, which promote infiltration and have many benefits to water quality.



## Streets

Streets within RV parks should be designed to provide the safest and most convenient access to all rental spaces and common use facilities. Streets should be constructed in a manner that allows emergency vehicles easy access into the park and throughout the internal street network. It should be required that all streets be paved with concrete or asphalt of a similar standard, and are a minimum of 24' for two-way traffic and 15' for one way traffic. Wherever an interior street is meant to curve, it should be required that there be a 45' turning radius to facilitate access for emergency vehicles.

## Frontage

To provide ample space between rental spaces, all spaces should be required to have a minimum frontage of 30' along an interior roadway.

## Disposal Stations

RV parks should be required to have at least one sanitary disposal station. These stations should only be used to remove and dispose of waste from RV holding tanks.



## Utilities

**Water** — A supply of accessible, adequate, safe, and potable water that is under pressure should be provided within an RV park. All aspects of the water supply from design, construction, and maintenance should be required to comply with the Texas Commission on Environmental Quality (TCEQ) standards as well as Fannin County standards. Rental RV spaces that are equipped with sewer and electrical connections should have two water outlets, while all other spaces only need one.

**Sewer** — Sewer connections should be connected to a public sewage system or an approved on-site sewage system if a public sewage system is not available. Sanitary sewage systems should be installed and maintained in compliance to TCEQ standards.

**Electricity** — Electrical outlets should be made available to all rental pad sites. They should be installed in compliance to the State of Texas Electrical Code. Electrical utility lines should be placed underground so as to not disrupt the look and feel of the RV park.

## Refuse Disposal

Refuse disposal should be made accessible to all occupants of the RV park. One small refuse container should be required within each rental space and several large containers should be located throughout the park. Large refuse containers should be required to be screened from public view. Park owners should be responsible for the appropriate collection and removal of refuse.

## Landscaping

Grass and other natural landscaping should be required throughout all RV parks and should be designed to give parks an aesthetically pleasing appearance within the park and along the frontage from major roadways. Landscaping should also serve as a buffer between the RV park and adjacent properties.

## Structural Additions

Canvas awnings, screened enclosures, platforms, or any other temporary structure that is normally associated with camping should be allowed within a rental space, but must be removed when the space is vacated. No other structural additions should be allowed.



# Stormwater Management Recommendations

## Subdivision Plats

A subdivision plat should not be approved that does not make adequate provisions for stormwater runoff. Additionally, a stormwater drainage plan should be prepared in accordance with standard engineering practice, as part of the subdivision final plat.

## Design Criteria

Drainage structures should be designed to accommodate runoff from a storm event. The County should work to develop the appropriate threshold. The facilities should also be designed so as to minimize any increase in the quantity or velocity of stormwater runoff from the subdivision.

## Low-Lying Lands Along Natural Drainage Course

Low-lying lands along natural drainage courses subject to flooding or overflowing during storm periods should be preserved and retain their natural state as drainage ways, and should not be included as residential lots in the subdivision.

## Primary Roads

Additional right-of-way may be needed at intersections and for specific site features to promote efficient stormwater management practices.



# Summary | Future Land Use Plan

The Future Land Use Plan and Map lay the foundation for how the lake area should be developed. This chapter establishes land uses and the types of development envisioned to occur. Recommendations for the important qualities of development are also listed.

## Major Themes:

1. The lake area should be developed as a desirable home, commercial, and tourist destination
2. The lake area should primarily have a rural feel, with some areas for more intense development
3. The southern half of the lake is anticipated to develop first and should have a mixture of large and small lot residential development
4. Nonresidential uses should occur at locations shown on the Future Land Use Map



# Chapter 4

## Transportation Plan

**Chapter Purpose:** To ensure that roadways provide access around all parts of the lake and to all destinations in the County

### Introduction

The thoroughfare system forms one of the most visible and permanent elements in a community. It establishes the framework for community growth and development and, along with the Future Land Use Plan, forms a long-range statement of public policy. As the alignment and right-of-way of major transportation facilities are established and adjacent property is developed, it is difficult to facilitate system changes without significant financial impacts. However, by incorporating programmed land uses and planning for future roadway needs, strategies that maximize the land use and transportation relationship can be developed.

More specifically, the transportation system should:

- Provide mobility and accessibility at appropriate levels
- Expand as needed to meet the demands of the area's anticipated development
- Be economically feasible for the citizenry and the County
- Be correlated with regional considerations

### Existing Transportation Conditions

#### Daily Traffic Volumes

U.S. Highway 82 and State Highway 78 experience the highest traffic volumes in the area surrounding the Lower Bois d'Arc Creek Reservoir (LBCR). The lowest traffic volumes are found on east FM 100 and north FM 273. According to the TxDOT Annual Average Daily Traffic Counts shown in Figure 15, there are approximately 6,900 cars per day at the western end of the planning area and 5,400 cars per day along the eastern end near Honey Grove. This can indicate that US 82 mainly serves as a connection for cities that lie along the roadway.

#### Current Transportation Systems

##### Regional Highways

There are three major highways that run at a close proximity to the LBCR and play a key role in providing current and future mobility to the reservoir: SH 78, SH 56, and US 82.



### **State Highway 78**

SH 78 is a TxDOT maintained highway located just west of the proposed LBCR. The roadway runs in a predominately southwest-to-northeast direction beginning at the intersection with IH 30 in Dallas and travels approximately 90 miles north-northeast to Oklahoma’s border. The highway provides a major link from the DFW Metroplex to the LBCR area.

### **State Highway 56**

SH 56 is a TxDOT maintained highway located just south of the proposed LBCR. The roadway runs east-west parallel with US 82 from Whitesboro to Honey Grove. This highway will not be affected by the lake; however, it connects the Fannin County cities of Savoy, Ector, Bonham, Dodd City, Windom, and Honey Grove. SH 56 is anticipated to see increased traffic due to the proximity to the LBCR.

### **U.S. Highway 82**

US 82 will be a key to the growth and development of LBCR’s surrounding area. The County should ensure that it is aware of and greatly involved in any discussions or decisions related to US 82. Figure 15 depicts the traffic volumes for the major roadways surrounding the LBCR. US 82 carries more vehicles per day than any

other roadway in Fannin County. The heaviest traffic volumes on US 82 are near the intersection with CR 2915. Currently, TxDOT has a project under development pertaining to US 82 - an approximately 14.5-mile strip located between SH 78 and FM 100 expected to have two lanes in each direction and shoulders. The estimated cost for the project is around \$38,000,000, and there is no expected start or completion date known at this time.

### **U.S. Highway 82**



## Public Transportation

### Texoma Area Paratransit System (TAPS) Public Transit

The TAPS Public Transit provides curb-to-curb service that runs throughout the Texoma Council of Governments region, which includes the counties of Clay, Cooke, Fannin, Grayson, Montague, and Wise. Trips are prioritized to seniors (60+ years) and individuals with disabilities. Seniors and individuals with disabilities may request a trip for any purpose, including to keep an appointment, get to work, go shopping, get to an educational facility, or any other reason. Riders are asked to schedule a ride with the Get-a-Ride services at least two days before the trip date.

## Air Transportation

### Jones Field Airport

The Jones Field Airport was constructed in 1941. The airport is located 2 miles north of the central business district of Bonham and five miles southwest from what will be the LBCR. Jones Field Airport covers an area of approximately 300 acres, at an elevation of 618 feet above the mean sea level. Once an Air Force base, the airport currently serves as a general aviation airport owned by the City of Bonham. The airport is predominately used by people who have single engine airplanes. Each fall, the airport hosts one of Bonham's biggest festivals, the Bonham Festival of Flight, which attracts people from all over Fannin County to see the airshow. Access to Jones Field Airport is provided via SH 78, north of its intersection with US 82.

### TAPS Service Area Map

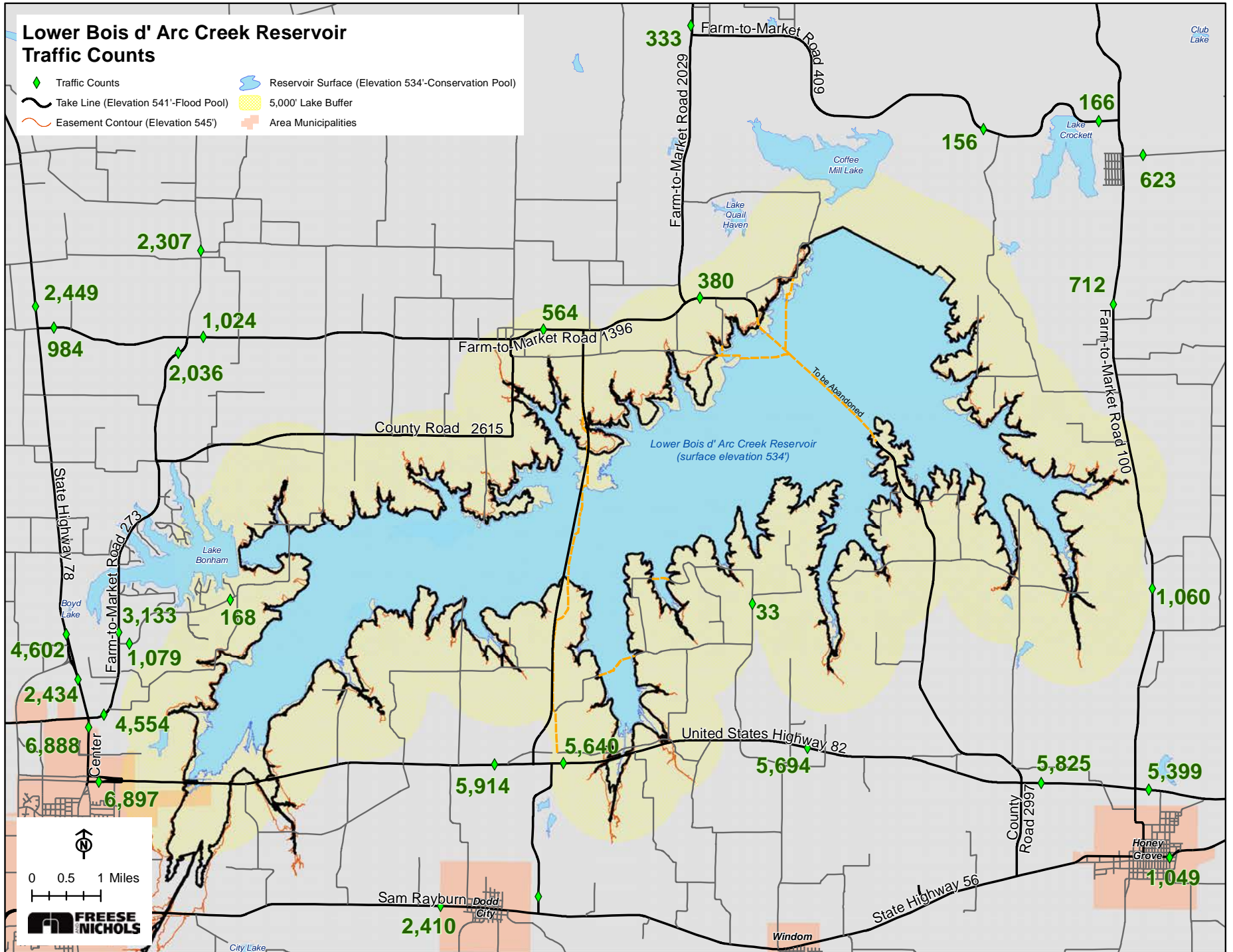


Source: [www.tapsbus.com](http://www.tapsbus.com)

### Municipal Airport Example



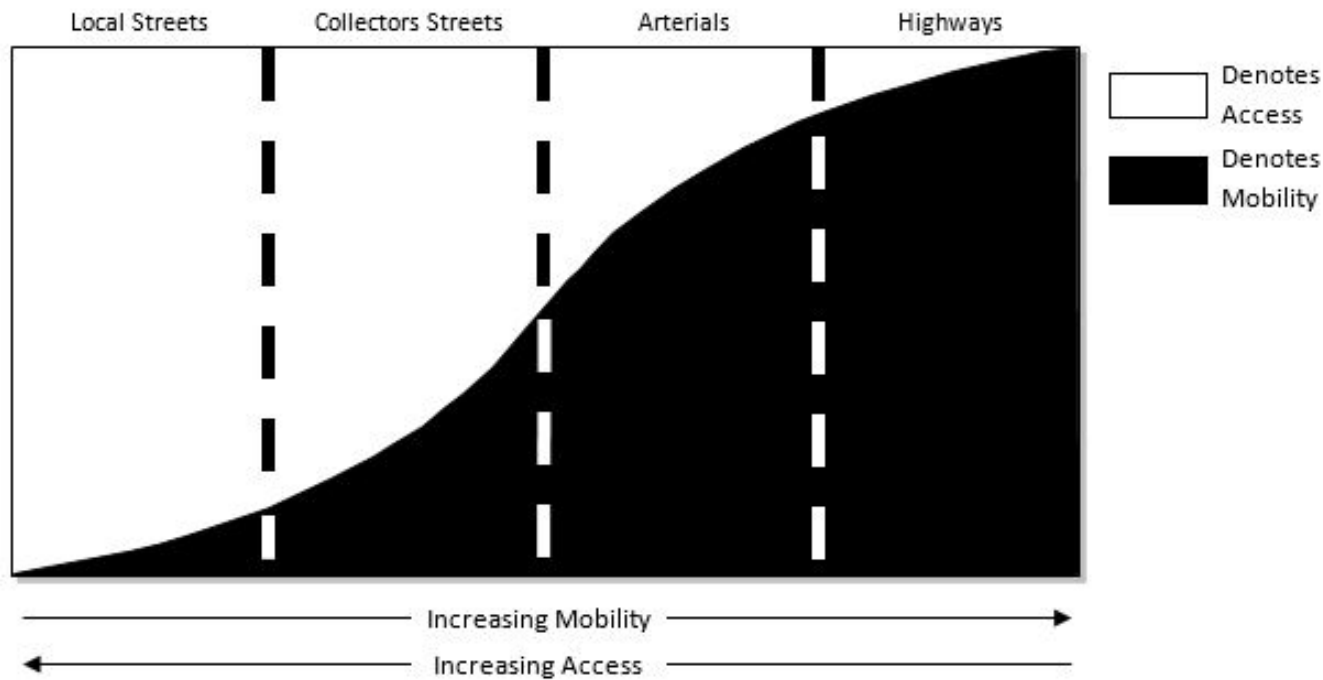
Figure 15. Traffic Count Map



## Access Management and Connectivity

Access management refers to the practice of controlling access allowed onto a roadway by considering specific design criteria for the location, spacing, design and operation of driveways, median openings and intersections. Generally, as the capacity of a roadway is increased, it is important to ensure the safe access to adjacent properties. Not only does access management provide for safer driving conditions, but it also enhances the visual appearance of roadways. To avoid having access points at a close proximity to one another, only one driveway should be allowed per lot. If that is not feasible, driveways should be separated by a minimum of 150'. Developments that are placed within 100' of neighboring establishments should provide connections and cross access easements, both as walkways and drives. Additionally, vehicles should not park within the right-of-ways leading to adjacent properties.

Figure 16. Functional Classification





## Local Thoroughfare System

The Transportation Plan for LBCR is based upon a classification system that recognizes that every roadway within the planning area can be described according to its anticipated function. Thoroughfare types, as discussed in the following sections, will be classified as primary, secondary, and local. Although this does not follow the typical functional classification system (i.e., arterial, collector, and local roadways), the hierarchy used herein is thought to be the most suitable for the LBCR area. The following section contains roadway cross-sections for the applicable types of thoroughfares shown on the Transportation Plan Map. The cross-sections are intended to help the County provide for adequate mobility along the expected future high-traffic roadways, while also providing for access to local land uses. The Transportation Plan Map shows the future recommended roadways according to the hierarchical system defined herein. Table 9 describes the roadway types in relation to various characteristics.

**Table 9. Summary of Roadway Cross-Sections**

Roadway Type	Right-of-Way Width	Purpose
Primary Roadway	120'	Accommodate high levels of traffic volumes; provide access to and around the lake; mobility is key element; access to properties is limited
Secondary Roadway	100'	Provide greater access to the lake; mobility and access are equally important
Local Roadway	60'	Provide access to properties; slower speed facilities

## Primary Roadways

It is recommended that a Primary Roadway have 120 feet of right-of-way width. It is the largest roadway section within the area that is immediately surrounding LBCR. Additionally, trails can be implemented in the shoulders of the roadways at a future date when trail connectivity exists. Figure 17 provides a cross-section for a Primary Roadway with a trail implemented into the right-of-way. There are eight Primary Roadways shown on the Transportation Plan Map, which include:

- US 82
- E. Sam Rayburn Drive
- FM 897
- FM 100
- FM 409
- FM 2029
- FM 1396
- SH 78

These roadways are expected to be the main routes that travelers will use to access the different areas of the lake. These roads create a large loop around the lake, with one roadway, FM 897, bisecting the lake from north to south.

## Secondary Roadways

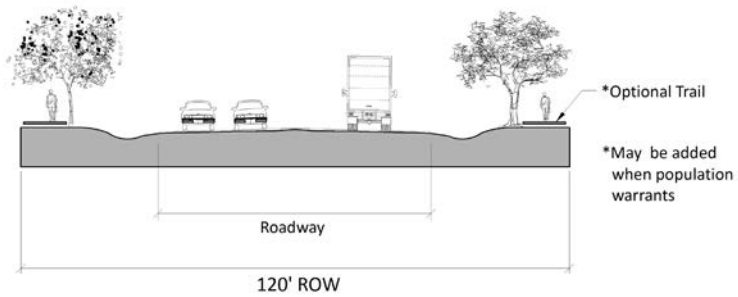
Secondary roadways are intended to distribute traffic from local access streets and funnel it to major thoroughfares. Secondary roadways are intended to provide more mobility than local streets, and local streets are intended to provide more access than secondary roadways. Secondary roadways should provide access to adjacent land uses as well as the key areas found around the LBCR, such as marinas and nonresidential developments. It is recommended that roadways of this classification have a 100' right-of-way that will ultimately accommodate a four-lane undivided roadway. Examples around LBCR include:

- FM 273
- County Road 2615

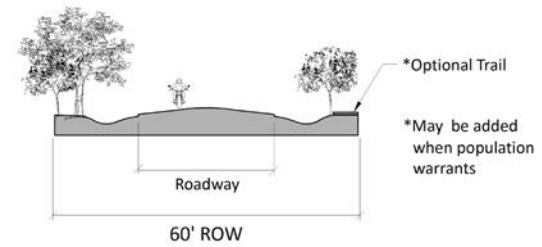
## Local Roadways

Roadways identified as local are designed to convey light volumes of traffic, generally around 1,000 or fewer vehicles per day. These roadways are primarily intended to provide access to adjacent properties. The mobility aspect of local roadways is secondary to accessibility. Due to the fact that local roadways are generally constructed within residential areas, safety is of high importance. It is recommended that local streets be configured to discourage through-traffic movement. All County Roads and a few FM roadways within the LBCR planning area have been designated as local roadways. Refer to Figure 19 for a graphic depiction of the recommended local roadways.

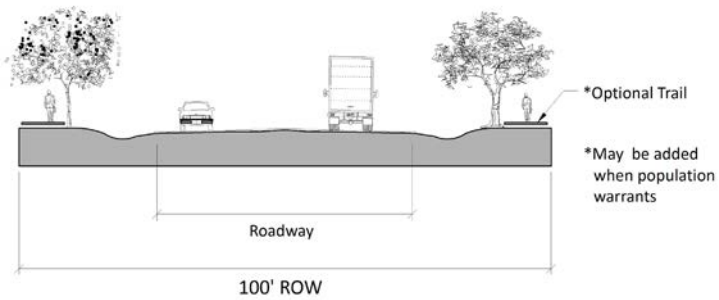
**Figure 17. 120' ROW Cross-Section for Primary Roadways**



**Figure 19. 60' ROW Cross-Section for Local Roadways**

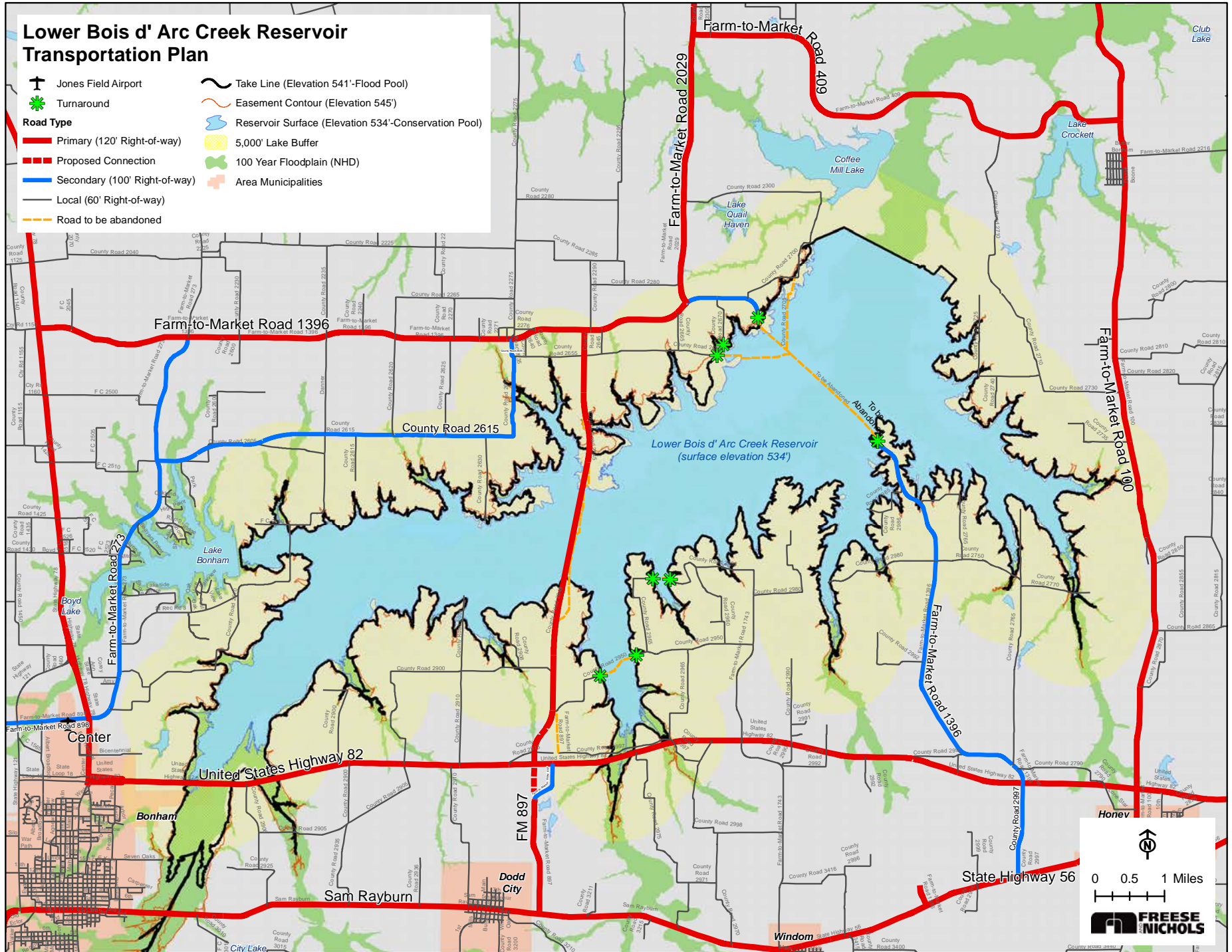


**Figure 18. 100' ROW Cross-Section for Secondary Roadways**



[This page is intentionally left blank for double-sided printing]

Figure 20. Transportation Plan



## Summary | Transportation Plan

The thoroughfare system is the backbone of the Plan. These roadways will help transport people to, from, and around the lake. This chapter establishes the hierarchy and locations of the thoroughfares.

### Major Themes:

1. It is important to plan for access around the entire lake
2. It is important to ensure that all emergency service vehicles can quickly access all parts of the lake area
3. Roads and roadway improvements will help to drive growth and development
4. Trails along certain roadways will help to provide a superior recreational system



# Chapter 5

## *Parks, Recreation, Trails, and County Connectivity Plan*

**Chapter Purpose:** To create a unique, well-connected recreation system for County residents and visitors to enjoy

### **Introduction**

A vital component for a community is the space devoted to satisfying active and passive recreational needs. The LBCR will provide a recreational asset to Fannin County. The lake's close proximity to the Dallas-Fort Worth region will attract many weekend visitors. While it is important to provide space for parks and recreation, it is also important to preserve open space to maintain the natural feel of the environment. This chapter will help coordinate parks and recreation efforts by Fannin County and other regional entities.







## Public Access to the Lake

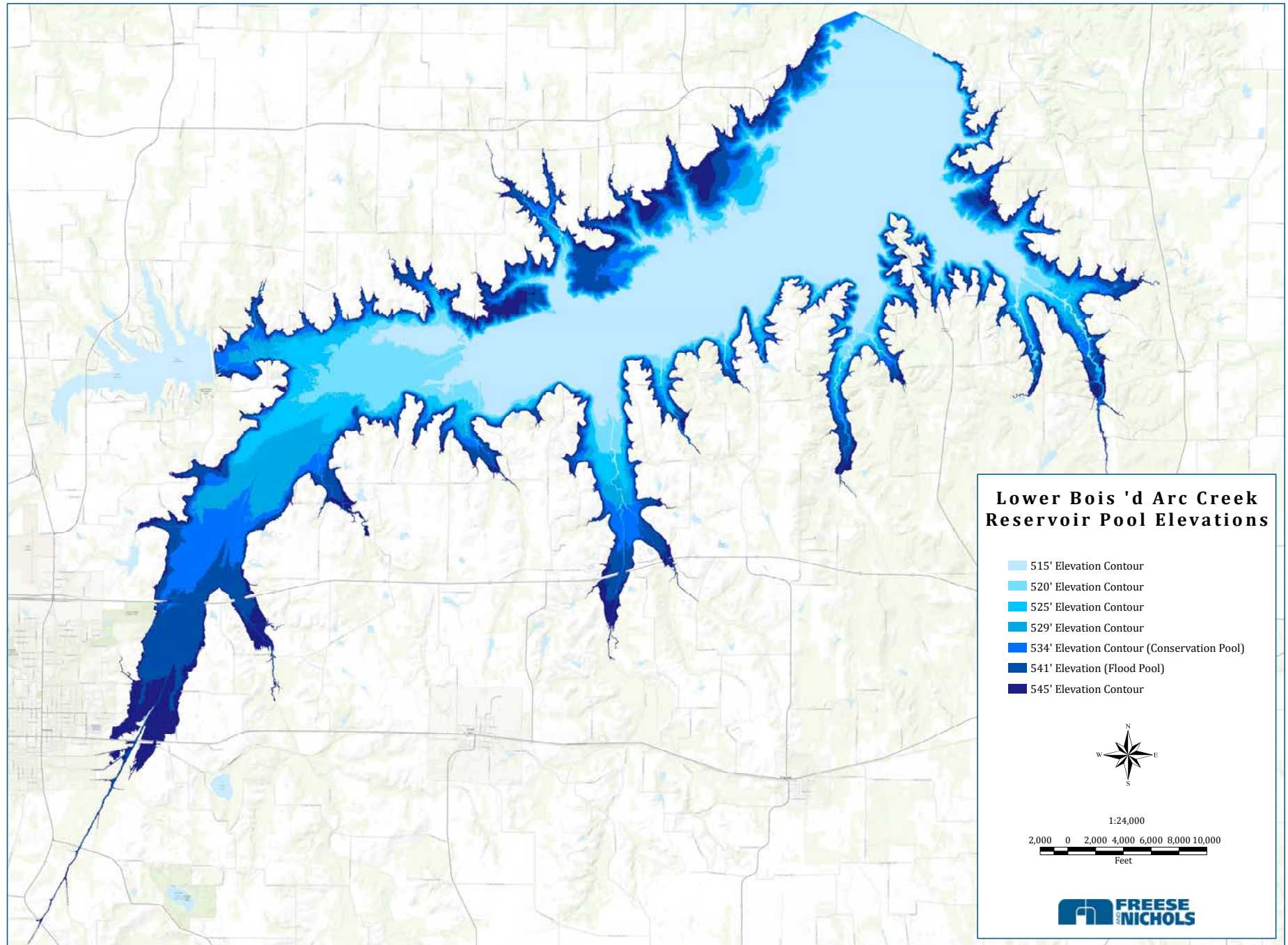
Public access to the LBCR is vital to Fannin County and its residents. It is important that residents and visitors are able to fully access and enjoy the lake, even if they do not own lake front property; however, the public access points should still be appropriately situated to allow the County to better manage public resources and safety. A limited number of public access points are proposed because the County seeks to maintain quality public boat ramps while ensuring fiscal responsibility.

Public access points for launching boats in the water are identified in Figure 22. These public access points are easily accessible via roadways and trails. Most of the lake's visitors will likely come from US 82; therefore, two public access points were identified on the south side of the lake. Public access points were identified on all sides of the lake to give all residents and visitors sufficient access. Three of the public access points are near areas identified for suitable marina locations. These access points are also areas where non-residential uses could potentially develop. The other identified public access points are in areas where parkland was identified.

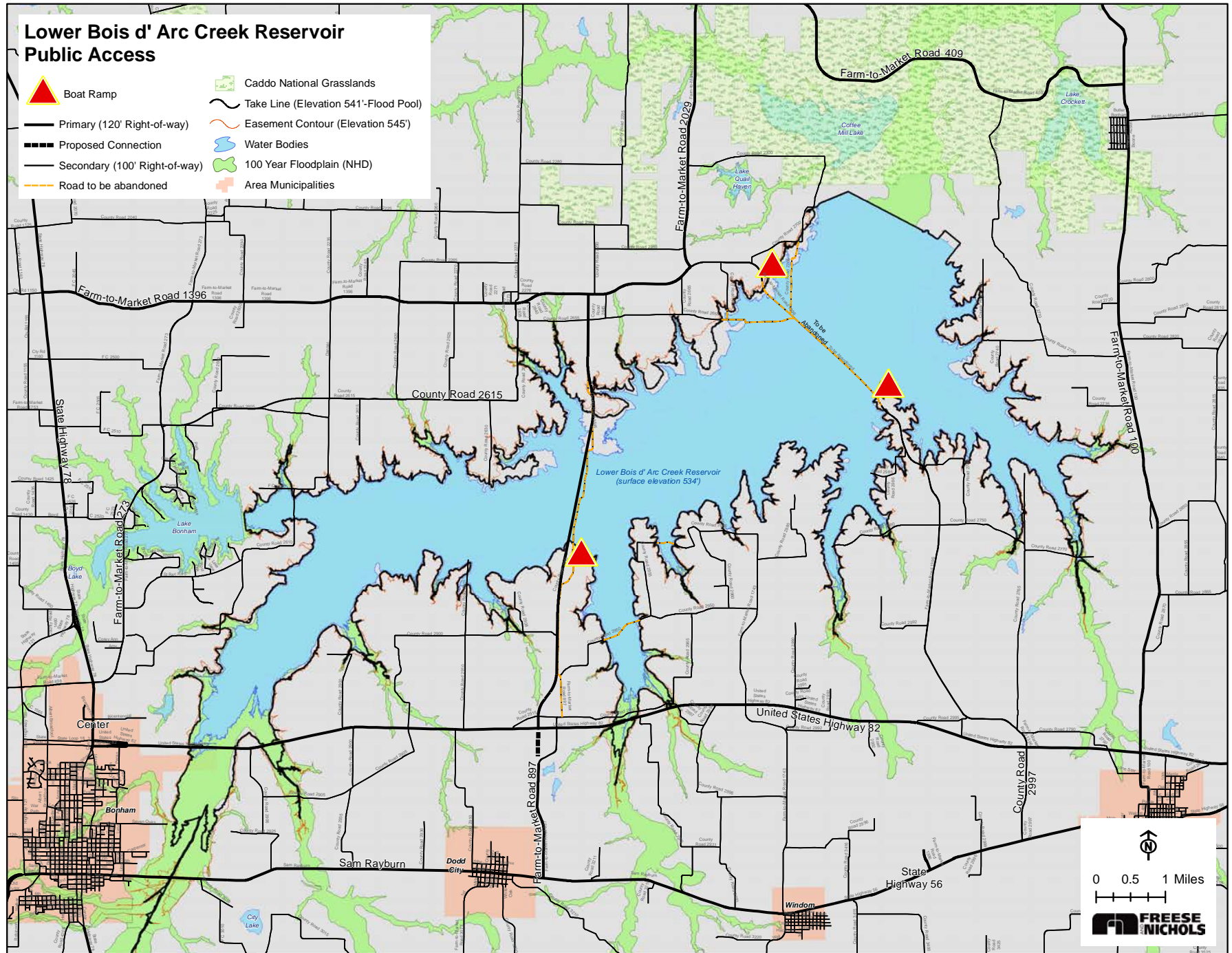
Varying lake levels were taken into account when identifying public access points because the upper end of the lake (the western portion) will be the first part of the lake to experience limited access in a season of drought, due to higher elevations. Figure 21 depicts the pool elevations of the LBCR.

School districts were also taken into account in the placement of public access points. Development generally occurs around public access points near major thoroughfares; thereby creating residential tax revenue for the school districts. There are three public access points initially planned at various locations around the lake.

**Figure 21. LBCR Pool Elevations**



**Figure 22. Public Access Points Map**



## Parks | Active Recreation

Lakes are generally associated with boating recreation; however, there are more recreational opportunities around the lake that will add value to the LBCR. Large parks with playgrounds and trails should be developed around the lake near the areas designated for public access. Most parks should be connected by the trail system, which may be paved or unpaved. In certain areas, outdoor fitness equipment can be installed to promote healthy activity. This type of recreation is ideal for families and those that want to enjoy the lake without boating. Camping facilities will also add value to the LBCR. These facilities should be located near the water so that visitors can have a view of the lake. To protect the environment and the water quality, concrete pad sites with electricity should be provided. The campgrounds should be for short-term visitors only, to maintain the character of the lake. Additionally, visitors will have the ability to bring their pets to these public parks and trails. A regulation should be enacted that requires pet owners to pick up waste from their pets. All parks and trails should have pet waste stations installed to encourage cleanliness.

### Playground



### Swimming area



### Multi-use trail



### RV camping sites



### The LBCR parks are envisioned to have:

- Camping
- Playgrounds
- Swimming areas
- Trails (paved and unpaved)
- Fitness trails/exercise areas

*Locations for potential parks have been identified in Figure 24.*

## Parks | Passive Recreation

Many people enjoy lakes for the natural beauty rather than active recreation. The land around the lake is currently sparsely developed and very rural. This will allow for large amounts of land to be preserved for open space. This is not only important to preserve the environment, but also protect water quality. The land around the lake is home to many types of natural species, which can allow bird and animal watching. These environmentally-sensitive areas are generally on the southern portion of the lake and have been planned to be preserved as wetlands and open space by the NTMWD. Areas should also be designated for public picnic areas with seating, tables, and waste receptacles so that visitors can have a place to rest and eat. Another form of passive recreation is pier fishing, which is ideal for families with young children.

**Picnic tables**



**Nature preserve**



**Fishing pier**



**Pavilion**



### The LBCR parks are envisioned to have:

- Nature preserves
- Bird-watching
- Pier fishing
- Picnic areas
- Pavilions

*Locations for potential parks have been identified in Figure 24.*

## Trail Connections

Trails and sidewalks are important to the LBCR to promote non-vehicular mobility. All of the proposed parks are also connected by the trail system, which will allow visitors to freely move around the lake while enjoying the natural environment.

### Trail Connections around the Lake

The trail connections around the lake should connect as many parks and recreational amenities as possible so that visitors can travel freely between them. The trails should also tie into the regional trail network to increase the accessibility of the lake. Many of the proposed trails shown in Figure 24 are along existing roadways or easements to make implementation of the trails easier and more practical. There are many existing utility easements that are already cleared. Agreements and partnerships with landowners and the owner of the easement would allow for a useful trail connection. All trail connections should also be coordinated with surrounding entities to ensure that critical destination points are not overlooked. For example, the City of Bonham is the closest municipality to the lake and will be a destination where many visitors will stay. Coordination with Bonham's current park and trail system, including connections to adjacent Lake Bonham, are critical. It is not feasible to have a trail all the way around the lake near the water's edge because of private property. All trails should be multi-use to allow walkers, runners, and cyclists. Generally, a multi-use trail is 12' wide. The trail can either be paved or left natural depending on the environment of the area.

### Multi-use concrete trail



### Natural trail



## Utility Line Trail

An existing utility line and easement runs through the southern portion of the lake and may make a practical trail location. The trail may not cross the lake, but would connect different portions of the lake with smaller trail segments. The trails can be built as development occurs around the lake. The utility easement can be seen on the Future Parks and Trails map in Figure 24.

**Existing Utility Easement**



**Utility Easement with Trail**



## Regional Trail Connections

It is important to connect the County with trail connections and now is the best time to plan for these future trails. The regional trail connections should have a strong tie with historical areas and future developments to offer superior recreational opportunities.

### Northeast Texas Trail

When the Northeast Texas Trail is completed, it will be the longest hike and bike trail in Texas and the fourth largest in the United States. It is currently 130 miles long and runs from Farmersville (Collin County) to New Boston (Bowie County). It links 19 rural towns and seven counties. The trail is on an abandoned rail line that was released by Union Pacific and the Chaparral in the late 1990s and has now been land banked. This corridor does not have any active rail, but the entire corridor is preserved so that it could be used again for rail in the future. This trail is a very popular attraction and could be connected to the LBCR to add value to the lake and the trail. The trail runs south of Ladonia, near the potential site for Lake Ralph Hall. It will be necessary to provide connections from the LBCR to the trail to bring bicyclists and other people looking for trail recreation, allowing the LBCR to become a destination for parks and trails.

### “Old Bob” Rail Line - Connection to LBCR and Lake Ralph Hall

One way to connect the Northeast Texas Trail and Lake Ralph Hall to the LBCR is using the “Old Bob” rail line. The “Old Bob” rail line is an abandoned railroad corridor that runs north-south from Ladonia to Honey Grove. This corridor intersects with the Northeast Texas Trail and could provide a connection from the trail and Lake Ralph Hall to the LBCR. This corridor is not land banked, which means that the old line runs through private property. Right-of-way acquisition would be necessary to piece the corridor back together and make it possible for the public to use. While the possibility of acquiring the old railroad right-of-way is remote, this may be an opportunity in the coming decades to provide recreational opportunities and preserve east Fannin County history.



## Lake Ralph Hall

Lake Ralph Hall is a proposed reservoir for the Upper Trinity Regional Water District (UTRWD). The proposed new water supply will be located on the North Sulphur River in Fannin County, south of the LBCR and north of Ladonia. The addition of two lakes gives Fannin County a chance to plan for a successful future and leverage the lakes to benefit the County. Trail connections between the LBCR and Lake Ralph Hall are critical. As previously mentioned, the “Old Bob” rail line is a potential connection. There are also many existing water lines and utility easements that could be used as right-of-way for trail installation. The trail(s) between the two lakes should be wide enough to accommodate runners, walkers, cyclists, and even horses. Since the trail will be a true multi-purpose trail, it should be made of natural materials. This will be a fiscally-responsible way to implement a trail and also help to preserve the natural beauty of the area between the two lakes. The easiest way to acquire land for the trail connection would be to use the right-of-way along SH 34.

### Funding Mechanisms:

- The County will be responsible for implementing regional trail connections
- Partnerships with nearby cities, entities, and organizations
- State and Federal grants

Figure 23. Regional Trail Connection Map

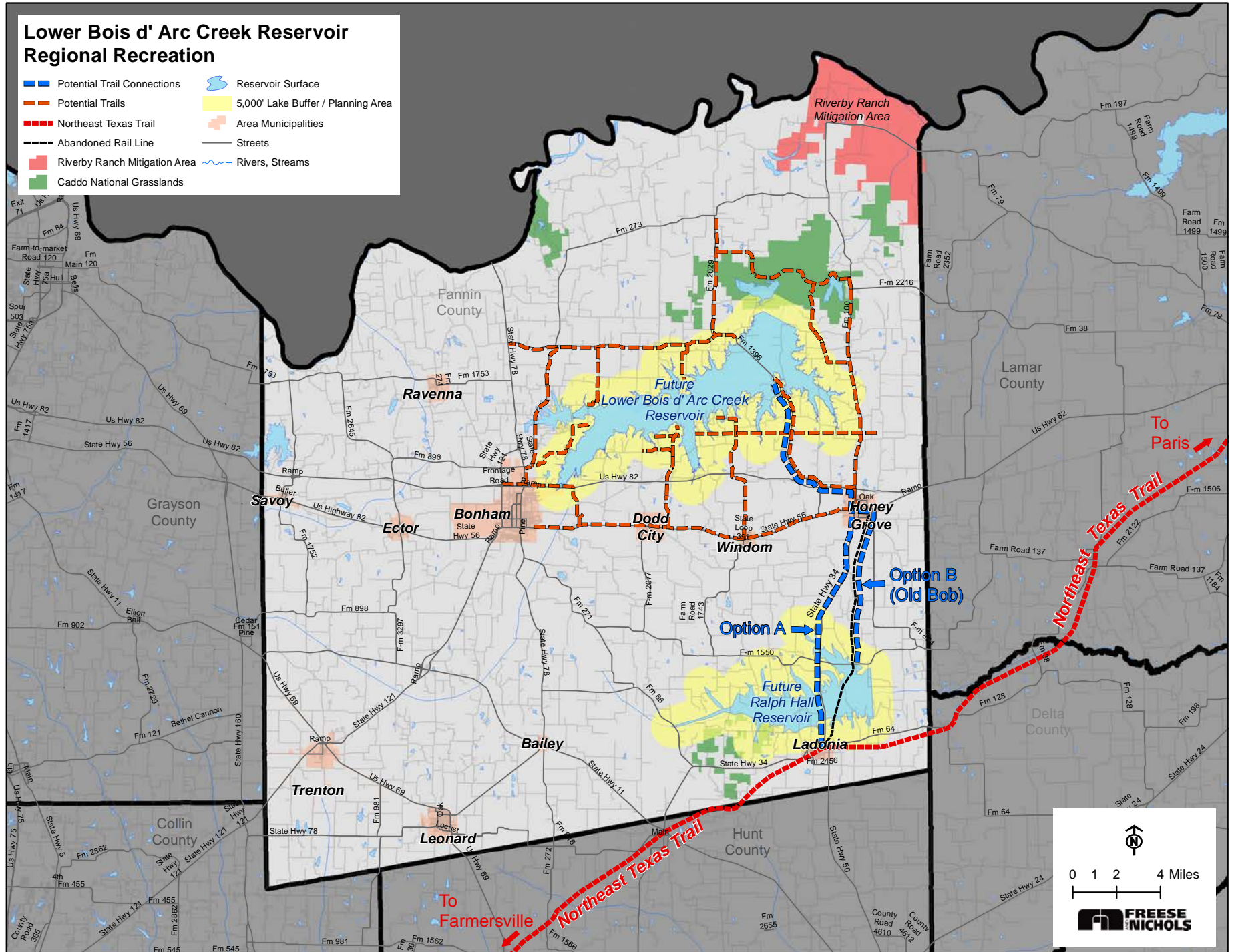
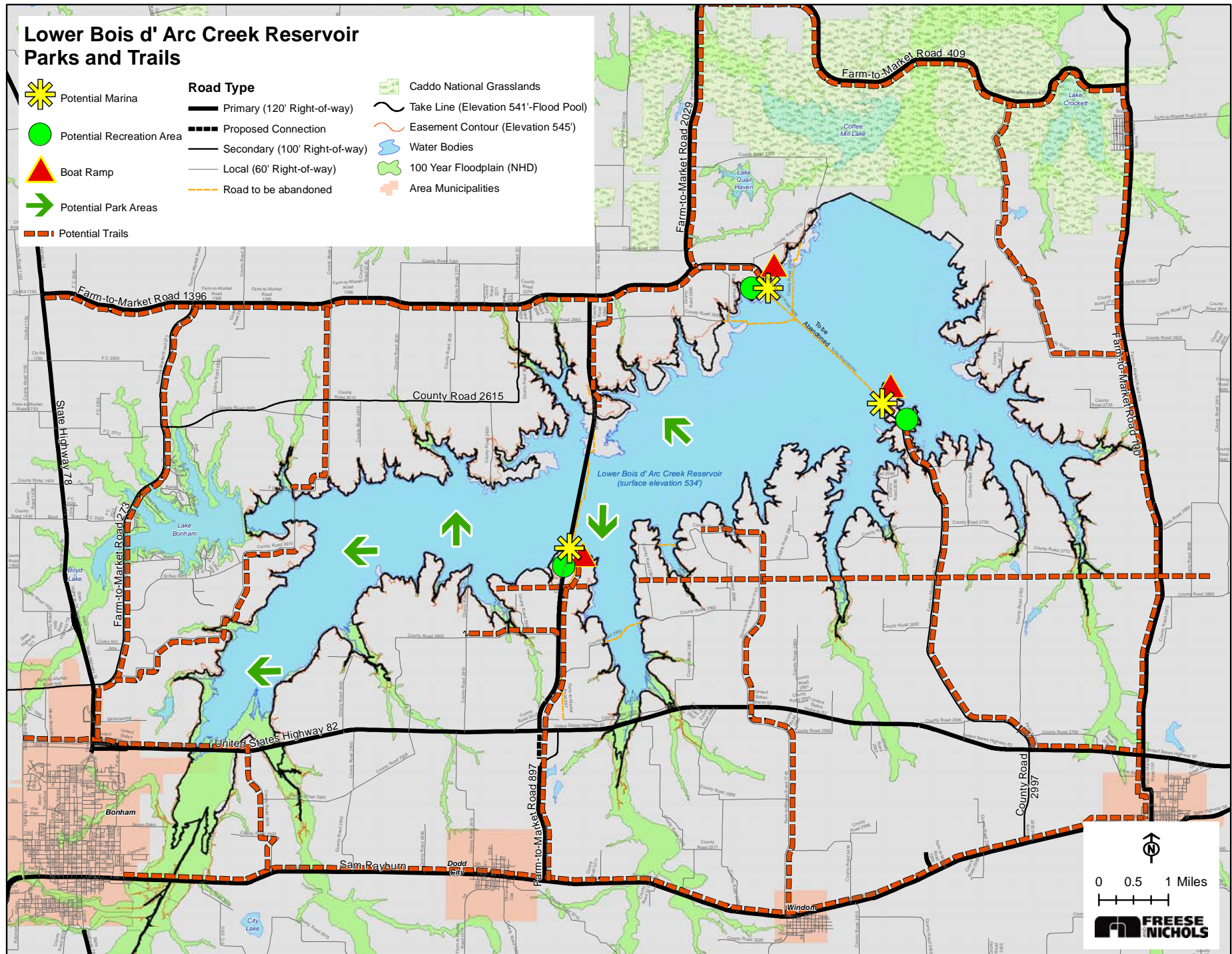


Figure 24. Future Parks and Trails Map



# Summary | Parks, Recreation, Trails, and County Connectivity Plan

One of the main purposes of the lake is to provide recreational opportunities for residents and visitors. This chapter establishes a plan for providing recreational opportunities in and around the lake. Additionally, this chapter plans for recreational connections between the LBCR and Lake Ralph Hall.

## Major Themes:

1. The recreational system will be a major asset for the County
2. Resident and visitors will be able to enjoy a superior recreational system
3. Hiking and biking opportunities will attract visitors
4. The LBCR will be a regional destination for tourists
5. Public access to the lake is important and will be accomplished through public boat ramps and marinas that are aesthetically-pleasing
6. Parks are planned to serve active and passive recreational needs
7. Trail connections are designed to be an asset to homeowners and visitors
8. Trails will take decades to develop, but the locations must be planned now
9. Linking the LBCR and Lake Ralph Hall will be a major accomplishment
10. Connecting to the Northeast Texas Trail will open both lakes to more tourists and recreational opportunities

**DESIGNATED  
CAMPSITE**

**TYPE II  
WILDLIFE MANAGEMENT AREA**



**A HUNTER  
FUNDED  
PROJECT**



# Chapter 6

## *Lake Edge Development Standards*

**Chapter Purpose:** To recommend standards for the development of uses around the lake's edge that can inform NTMWD's plan for boat docks and lake activities, while protecting water quality

### **Introduction**

The guidelines in this chapter are specific to the development around the edge of lake and are important to protect water quality and the natural beauty of the LBCR. These guidelines should be incorporated in the development of the zoning ordinance for the area close to the lake edge. Any guidelines or regulations related to developing on the land adjacent to the lake will be enforced by Fannin County. Any guidelines or regulations related to structures on or over the water will be under the authority of the NTMWD. Initial and annual fees will be required for boat docks and piers. The NTMWD owns the land under the water and the water itself. This chapter explains the County's vision for docks on the lake. The County recognizes that NTMWD is the sole authority responsible for allowing docks on the lake. A cooperative partnership between the County and NTMWD will ensure that desirable development occurs, while protecting the natural environment and water quality as well as minimizing shoreline erosion.





## Residential Guidelines for Boat Docks and Piers

### Registration and Inspection

Boat docks should only be permitted with the approval of the NTMWD. This will benefit the owner if emergency response or law enforcement is called to the location. Registration of boat docks will also help NTMWD locate the dock owner in the event of an emergency or maintenance issue. All boat docks are subject to inspection periodically and dock owners will be required to provide proof of adequate liability insurance as required by NTMWD. The dock owner is responsible for all dock maintenance.

Private docks are owned and maintained by private individuals; therefore, the individual assumes all responsibilities associated with the maintenance of a dock. Dock owners may also be subject to additional hold harmless agreements.



## Fixed Docks

Fixed docks consist of pilings fixed into the lake bed with decking on top. Since these docks do not move, they require less maintenance, support larger loads, will last longer, and are structurally stable. The biggest issue with fixed docks is that they can become submerged at high lake levels and can be unusable during low lake levels.

## PWC Floats or Lifts

Personal watercraft (PWC) floats or PWC lifts should be permitted along with the dock.

Fixed dock



Fixed dock



Fixed dock with PWC lift





## Design Guidelines for Docks and Piers

Prospective dock owners should check the water depth in the dock location to ensure it is adequate for the dock and associated activities. For example, small shallow coves may make it difficult to moor a large boat.

### Stress Loads

The stress exerted on a dock is proportional to its size and height. Larger docks must be engineered so that toppling is avoided and to accommodate increased stress by wind and waves. This stress occurs when a floating dock must absorb both the tallest side of the wave and the lowest side of the wave at the same time. This is more common in areas where the lake is wide and deep. A qualified engineer or dock builder should be consulted to determine the size and height that is best for the particular location. The dock should not be permitted if it cannot be proven to handle appropriate stress loads.

#### Recommended Guidelines:

- No dock or structure shall exceed 1,500 square feet
- Covered (roofed) structures must be open and not walled or enclosed. One exterior side may be walled for the placement of an approved storage area.
- A dock and any of its structures may not exceed 30 feet in height, as measured from the highest point of the structure above the normal pool elevation of the lake.
- Dock length shall be the shortest amount feasible to allow access to the lake, as determined by NTMWD, but in no case should exceed 150 feet

#### Desirable boat docks



## Dock and Pier Maintenance

It is essential to perform regular maintenance on boat docks to ensure the dock's usefulness. Poor maintenance can lead to a dock breaking loose and causing a hazard in the open waters. The owners should agree to maintain all docks in an acceptable and safe condition. All docks and piers should be subject to inspection.

### Unsafe dock



## Residential Wastewater

Per section 3.2.16 of the Fannin County Subdivision Ordinance:

*“to use individual on-site septic systems for sewage treatment a suitability study will be performed on the property and the study will be submitted with the preliminary plat. The purpose of the study is to verify that all of the proposed lots in the subdivision will comply with the Fannin County regulations for on-site sewage facilities. The individual of company performing the study must be qualified to perform site evaluations under the rules for on-site sewage facilities. Minimum lot size is one acre per the Fannin County On-Site Sewage Facility Regulations.”*

If these regulations cannot be met, the homeowner must connect to a centralized sewage system. Ideally, all homes would be on a centralized wastewater system to protect water quality.

## Nonresidential Guidelines for Marinas

### Location

Potential marina locations are identified and shown on the Future Parks and Trails Map in Figure 24.

### Size and Height

A marina should not exceed 30' in height. All marina roofs should be pitched to provide aesthetic appeal.

## Permitting, Registration, and Inspection

Marinas should be permitted by and registered with the NTMWD. This will benefit the owner if emergency response or law enforcement are called to the location. Initial and annual marina fees may be required. Additionally, all marinas are subject to inspection by the NTMWD or Fannin County; therefore, the marina owner is responsible for making all improvements necessary to comply with the lake edge development guidelines. It should be required that a marina owner maintain comprehensive general or public liability insurance that is suitable for the type of commercial use in operation.

### Undesirable marina



## Restrooms

Restrooms should not be allowed on docks, piers, or over the water in any manner. All restrooms for nonresidential uses must be on land and connected to an approved septic system or centralized wastewater system. No portable restrooms should be allowed near the shoreline. All floating buildings must provide continuous connection to the marina's wastewater system.

## Fuel and Pumpout Stations

Sanitary wastewater pumpouts are required for all marinas to address boats and RVs. Sewage will introduce dangerous pathogens into the water and must be controlled and addressed properly. Limiting the number of stations helps protect water quality. Boat fueling should be done at a gas dock. Fueling stations should be prohibited from using fuel with ethanol. Additionally, storing fuel in large quantities should be banned near the lake edge. The pumpout stations should be connected to an approved septic system or centralized wastewater system. All fueling stations must have a sign that clearly displays the TCEQ emergency spill hotline. All fueling docks should have wave protection to help stabilize boats. It is recommended to also have a personal watercraft (PWC) dock or platform to help stabilize the PWC.

### Safety Tips for Fueling

- Clear the area of anyone not involved in fueling the boat
- Make sure the boat is secure to the gas dock
- Turn off engine(s) and electronics
- Never fuel around an open-flame or while smoking
- Keep nozzle in contact with the edge of the fill to prevent spills
- Do not top off tank – know how much fuel the tank can hold and stop at 90% because fuel expands as temperatures rise
- Clean up any fuel spill immediately and wipe down any part of the boat that may have come in contact with fuel
- Treat fueling operations with care and remain present the entire time
- Use extra caution when fueling PWCs, since they sit closer to the water
- Report any fuel spills immediately to the TCEQ emergency spill hotline at 1-800-832-8224 (24 hours a day)

## Fish Cleaning Stations

Fish cleaning stations should be provided, which provides for the sanitary disposal of fish waste. Rinse water from stations should not runoff into the lake or use septic systems. Fish waste should not be disposed into the marina and fish cleaning on docks and floats should not be allowed.

## Pollution Control

Stormwater runoff from marina parking lots and other impervious areas is a significant source of pollution. Activities at marinas (boat scraping, cleaning, fueling, engine repair, fisheries, etc.) can elevate pollutant concentrations in runoff. The following practices will minimize the impacts marina operations have on stormwater.

## Boat Maintenance

To prevent pollution and protect water quality, certain boat maintenance should be performed with the vessel out of the water. If there is a likelihood that pollutants may be lost in the water, the maintenance should be performed in an area that is designed for that purpose. The following maintenance should be performed with the vessel out of the water or in a designated area:

- Repairs requiring the disassembly of the outboard or lower drive units.
- Bilge repairs requiring opening or penetrating the hull.
- Scraping, sandblasting, or painting the hull exterior or drive units.
- Interior or on-deck painting or similar activity involving aerosol application with a risk of over-spray or drip beyond the confines

of the vessel.

- To the extent practicable, minimize the use of soap and detergents in the marina environment.
- Ensure vessels, and any portable containers on such vessels, are appropriately drained of water to prevent the introduction or spread of invasive species.

### Recommended Guidelines:

- All areas of the marina should be cleaned on a regular basis to prevent oil, paint, dust, sanding residues, and other wastes from washing into surface waters, storm drains, ditches, swales, sloughs, and other watercourses.
- All drainage associated with maintenance, sandblasting, and repair activities should be separated from other stormwater discharges, and best management practices specific to those activities should be employed to minimize the chance for release.
- Sweep or vacuum boatyard areas and collect the debris. Sandblast grit, dust, and other work area debris should not accumulate.
- Covered work areas can prevent contamination of stormwater run-off, and can reduce the need for structural controls.

## Public Boat Ramps

Public boat ramps should only be located at public access points, as shown in Figure 22 or as amended in the future. Limiting the number of public access points will ensure that the water's edge is protected and that the boat ramps can be easily maintained.

### Recommended Guidelines:

- Each public boat ramp should have a designated parking area that is close to the ramp
- The parking lot should be connected to the ramp by the same pavement
- Boats that are trailered to launch at a boat ramp are typically 26 feet in length and all boat ramp facilities, including the parking lot, should accommodate this size
- The accepted national standard for the slope of a boat launch is 12% to 15%, and the preferred is 14%
- Each launch lane should be at least 20 feet - a 10 foot occupy zone and a five foot buffer zone on each side
- If more than one launch lane is provided, there should be boarding float access between each lane

### Examples of public boat ramps



## Nonresidential Setbacks

A parking lot or permanent structure, other than a dock or a combined storage area on the water's edge, should be set back at least 100' from the shoreline.

## Nonresidential Wastewater

All marinas and nonresidential uses must be connected to a centralized wastewater system or an approved system. Septic tanks should be prohibited.

## Open Storage

In areas around the lake's edge, mini warehouses and open storage should not be viewable from any primary or secondary street. Open storage uses along the roadway should screen all storage from public view. Boats should not be stored out in the open. Boat storage areas should be screened at least 6' high with a masonry wall or a row of evergreen trees.

### Undesirable boat storage



### Enclosed boat storage



## Water Quality

The LBCR is an important water supply source; therefore, water quality is of the utmost importance. To ensure the best quality drinking water possible, certain restrictions will be put in place by the NTMWD. Boating and fishing will still be allowed. All sightings of littering, pollution, or illegal dumping should be immediately reported to the lake office. In the event of a fuel spill, the Texas Commission on Environmental Quality's (TCEQ) emergency hotline should be contacted immediately.

### Tires near the shoreline



### Dumpster near the water



### Recommended Guidelines:

- Do not leave fuel containers on an open deck
- Store fuel in an approved container in vented storage areas
- Hazardous materials are not allowed to be stored on the marina (batteries, fuel, tires, oil, cleaners, antifreeze)
- Boats should be out of the water to be cleaned below the water line
- It is recommended to use a minimal amount of cleaning products
- All cleaning products should be phosphate-free and biodegradable
- Boats with sewage holding tanks must use an approved sewage pumpout facility at a marina around the lake
- Report any boat that is submerged or partially submerged at a marina, since the boat may contain gasoline, oil, or other hazardous materials
- Antifreeze is very harmful to water quality and the fish habitat and should be appropriately applied and properly disposed of
- Properly dispose of any trash and litter
- Any pollution concerns should be reported immediately

Immediately report any fuel spills to the TCEQ  
emergency spill hotline at 1-800-832-8224  
(24 hours a day)



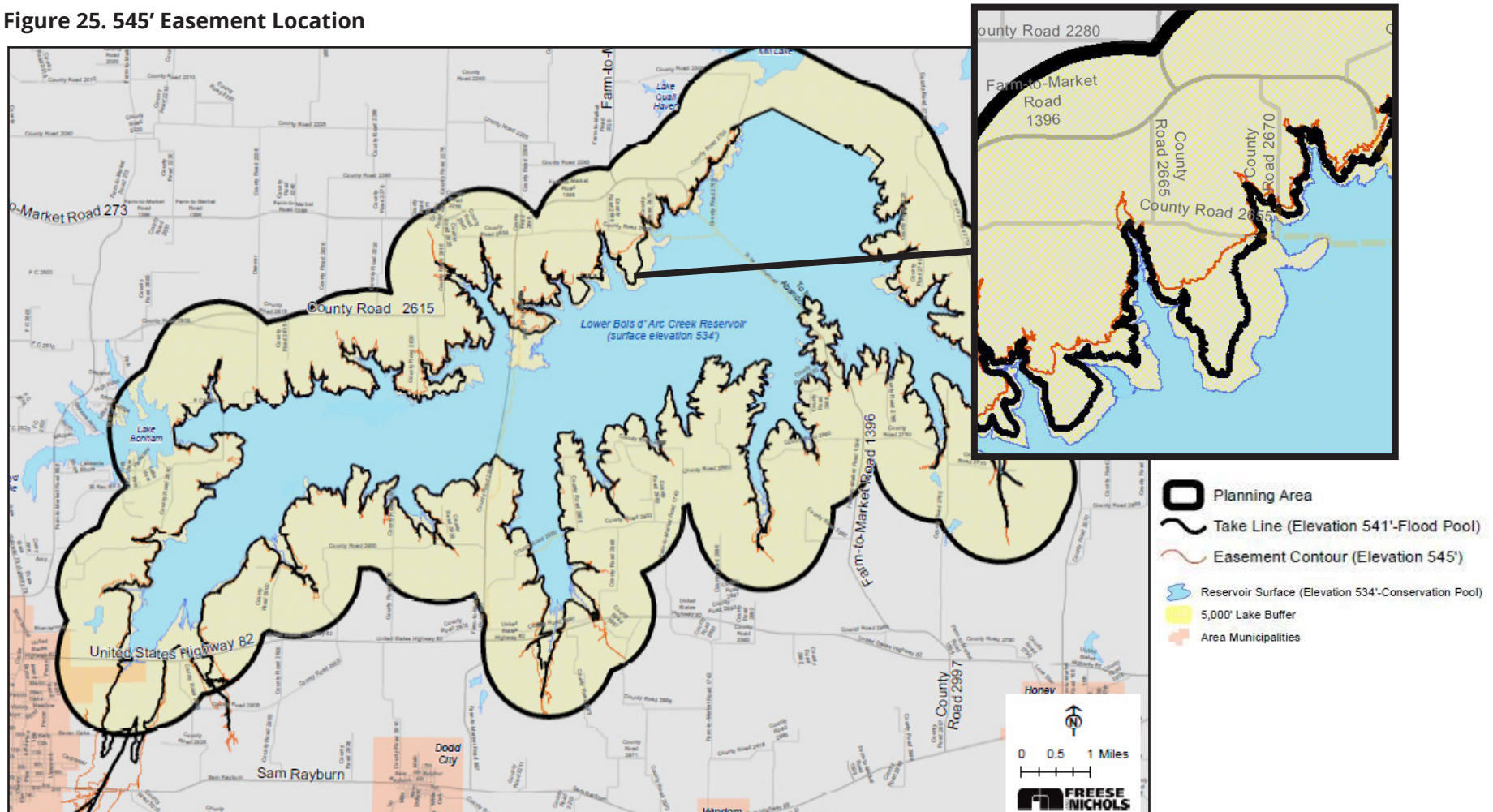
# Water Withdrawal

Water may not be drawn from the lake for residential or commercial uses unless approved by NTMWD.

## NTMWD Easement (Flowage and Floodplain Easement)

This easement is to be free and clear of all habitable structures. The easement cannot have any fill or dirt added to it. The easement is located between the 541' elevation (take line) and the 545' elevation. This is shown by the red line (easement contour) in Figure 25.

Figure 25. 545' Easement Location



## Erosion Control/Shoreline Stabilization

Shoreline erosion is a natural part of any lake. Controlling shore erosion is important to reduce sedimentation and the growth of algae and weeds, and to prevent property from eroding which decreases lot size. The following are basic stabilization methods to control and prevent shoreline erosion.

- **Native vegetation** – the deep roots of these plants keep the earth together and removal of the plants can cause the shore to weaken
- **Gentle slopes** – the gradual slope on a natural shoreline will absorb the energy of the waves
- **Healthy trees** – help to stabilize the shoreline
- **Rip-rap** – refers to medium/large granite or limestone stones covering the shore to prevent erosion by decreasing the impact of waves on the shoreline and is the preferred method of erosion control

### Retaining Walls

Retaining walls should be considered on a case-by-case basis and should be designed by an engineer. Retaining walls should be constructed from quality materials and should be designed to be aesthetically pleasing. Restrictions should be set for the amount of impervious surfaces that are immediately adjacent to the shoreline (excluding rip-rap and other bank stabilization structures). This will help to ensure best practices and preservation of riparian vegetation.

Example of natural shoreline



Retaining wall



## Lighting

All boat docks, piers, and marinas should be lighted continuously from sunset to sunrise and should meet all lighting requirements established by NTMWD. All lights should be required to be fixed – not blinking – so boaters do not confuse the light with a buoy light. It is recommended that lighting be directed downward to clearly identify the marina. All lighting should be designed to illuminate the boat dock so that the light does not “blind” boat operators when they pass the structure. No bulbs should be directly visible to boaters or a neighbor’s property. The following outlines what type of lighting should and should not be used.

- **White lights** - discouraged because they attract insects and can have an adverse blinding effect on boaters
- **Yellow/amber lights** - encouraged because they are less likely to attract insects and are easy on the eyes
- **Red/green lights** - prohibited because boaters may confuse with the lighting that typically marks navigation
- **Reflectors** - must be white or amber and and at least 20 square inches and cannot be used to replace lighting
- **Bulb wattage** - low watts are encouraged (40 watts or less); low wattage fluorescent lights in incandescent bases have a longer lifespan

### Lighting examples



## Electrical

Electrical wiring over the open water surface should be prohibited. Additionally, it is the marina owner's responsibility and liability to protect the safety of guests while on the marina. It is recommended that an electrical system on a marina be installed and maintained in compliance with the National Electrical Code (NEC) and the National Electrical Safety Code (NESC). The National Fire Protection Association (NFPA) 303 Marinas and Boat Yards document should also be used as a guideline. All electrical systems should be designed and installed by a licensed electrician.



### Recommended Guidelines:

- All electrical equipment and materials must be approved by the manufacturer for use in wet/damp locations
- All electrical equipment and materials must be firmly attached to the surface on which they are mounted
- Only copper conductors should be used
- All electrical equipment that is in locations where physical damage may occur must have guards or enclosures
- All unused openings in boxes and conduits should be closed
- Suitable covers should be on all boxes and enclosures to prevent accidental contact with energized parts
- Electrical cables installed in the water should only be Type G, Type W, or Marina and Boatyard Cable
- A strain relief device should be installed at all termination points
- Never use extension cords in place of permanent electrical wiring
- Low-voltage (non-battery operated) and solar-powered systems are highly recommended and must be in accordance with the National Electric Code (NEC)
- Floating marinas must provide additional slack on wiring to accommodate varying lake levels
- The service equipment used for the system must be located on the adjacent shore



# Summary | Lake Edge Development Standards

The lake edge and its future development is critical in determining the future of the lake. This chapter defines how the lake edge development will occur.

## Major Themes:

1. Quality guidelines have been developed to show the vision for this type of development
2. Septic tanks are limited to large lot residential developments of one acre or more because of the hazardous effect that a failing septic tank can have on the quality of the water supply
3. Nonresidential guidelines have been established to promote quality marina development
4. Shoreline erosion control is recommended
5. The recommendations of this chapter should be enforced through a zoning ordinance
6. There are constraints around what can be constructed in the NTMWD easement



# Chapter 7

## *Implementation Plan*

**Chapter Purpose:** To use the vision for the lake and plan recommendations to create specific implementation steps for the County to achieve the vision of the Comprehensive Plan

### **Introduction**

Successful plans establish a clear vision for the future and identify the steps necessary to achieve that vision. This section completes the Comprehensive Plan by providing implementation techniques and priorities that address the vision, recommendations, and related policies established herein. This Implementation Plan is structured into a coordinated action program so that County leaders, staff, and other decision-makers can easily identify the steps that are necessary to achieve the vision for the LBCR. It is also important to note that counties or cities cannot afford to complete all of the desired tasks at once; therefore, it is important to identify the top priorities that are most critical for achieving the vision. Many of these recommendations will take several years to complete, but this plan will help the County to identify action items.

### **The Role of the Comprehensive Plan**

#### **A Guide for Daily Decision-Making**

Many diverse individuals and groups will be involved in the development of land surrounding the lake. In the future, each new development that takes place represents an addition to the County and the lake area's physical form. The composite of all

such efforts creates the County as it is seen and experienced by its citizens and visitors. If planning is to be effective, it must guide each and every individual development decision. The County, in its daily decisions pertaining to whether to surface a street or amend a zoning ordinance provision should always refer to the basic concepts outlined within the Comprehensive Plan. A private builder or investor, likewise, should recognize the broad concepts and policies of the Plan so that their efforts become integrated into planning efforts of the LBCR area and the County.

#### **Zoning and Subdivision**

The processes for reviewing and processing zoning amendments, development plans, and subdivision plats provide significant opportunities for implementing the Comprehensive Plan. Each zoning and development decision should be evaluated and weighed against applicable recommendations and policies contained within this Comprehensive Plan. The Plan allows the County to review proposals and requests in light of an officially prepared document adopted through a sound, thorough planning process. If decisions are made that are inconsistent with Plan recommendations, then they should include actions to modify or amend the Plan accordingly in order to ensure consistency and fairness in future decision-making. The





zoning ordinance represents a significant measure that the County can take to implement Comprehensive Plan recommendations.

### **A Flexible and Alterable Guide**

The Comprehensive Plan for the LBCR is intended to be a dynamic planning document – one that responds to changing needs and conditions. Major plan amendments should not be made without thorough analysis of immediate needs, as well as consideration for long-term effects of proposed amendments. The County Commissioners, Zoning Commissioners, and other officials should consider each proposed amendment carefully to determine whether it is consistent with the Plan’s goals and policies, and whether it will be beneficial for the long-term health and vitality of the LBCR area.

### **Annual Reviews**

At one-year intervals, a periodic review of the Plan with respect to current conditions and trends should be performed. Such ongoing, scheduled evaluations will provide a basis for adjusting capital expenditures and priorities, and will reveal changes and additions that should be made to the Plan in order to keep it current and applicable long-term. It would be appropriate to devote one annual meeting of the Zoning Commission to reviewing the status and

continued applicability of the Plan in light of current conditions. By such periodic evaluations, the Plan will remain functional, and will continue to give civic leaders effective guidance in decision-making. During reviews, consideration should be given to the following:

- The County’s progress in implementing the Plan;
- Changes in conditions that formed the basis of the Plan;
- Community support for the Plan’s goals and recommendations;
- Changes in County officials’ policies and priorities; and
- Changes in State laws.

### **Complete Review with Public Participation**

The Comprehensive Plan should undergo a complete, more thorough review and update every five to ten years. The review and updating process should begin with the Zoning Commission and should be a complete review. Upon completion of LBCR, and its filling with water, it is likely that the County will need to reevaluate the Comprehensive Plan to ensure it adequately addresses development and growth. Specific input on major changes should be sought from various groups, including property owners, civic leaders and major stakeholders, developers, merchants, and other citizens who express an interest in the long-term growth and development of the LBCR.

# How to Implement Chapter 3: Future Land Use Plan

## 1. Adopt Zoning Regulations

### Action

The County should adopt zoning regulations in accordance with the Future Land Use Plan and Map.

### Rationale

Zoning will ensure that future developments will occur according to the Future Land Use Plan and Map.

## 2. Utilize the Full Boundaries of the Zoning Authority

### Action

The County should adopt zoning regulations within 5,000' of the shoreline (534 feet AMSL) in accordance with Texas Local Government Code Section 231.132.

### Rationale

In order to provide the best environment to manage new development, it is necessary to apply zoning within the entire 5,000' area around the lake. With the exception of the intersection of US 82 and FM 897, the land from 3,500' to 5,000' is shown as agriculture and will serve to keep the area predominately rural and also as a buffer to the other zoning districts, which will be applied closer to the lake shore.

## 3. Coordination for New Lake Parks

### Action

The County should work with other local governments and reach out to landowners regarding the possibility of creating parks at the locations shown on the Future Land Use Map.

### Rationale

Parks are generally acquired in two manners. First, a local government can purchase land from a property owner for a park. In this case, the sooner parkland can be purchased, the more affordable the land is to acquire. The second manner is through a partnership with the landowner, which generally occurs when the landowner develops the land and would like the local governments to eventually take ownership for operation and maintenance for the park.

#### 4. Amend County's Subdivision Ordinance

##### Action

Amend the County's subdivision ordinance to require two points of access into residential subdivisions, as well as trail connections.

##### Rationale

As new residential development occurs, the County's subdivision ordinance will be used to regulate the design of neighborhoods and this design should reflect the vision of the Comprehensive Plan.

#### 5. Coordinate with Local Residents, the City of Bonham, and NTMWD to Ensure Water Quality in the Watershed

##### Action

A committee or civic group (e.g., Friends of the Lake) should be created to help monitor and identify areas contributing to sediment and pollution runoff, promote the care and beautification of the lake, and be a forum for public comment and involvement.

##### Rationale

A committee or civic group should be developed to ensure the quality of the lake can build support for implementing the vision and serve as a way for the general public to become involved with lake affairs.

#### 6. Protect the Visual Appearance of US 82, where possible

##### Action

Ensure zoning regulations protect the look and feel of the highway by prohibiting open storage or by requiring businesses to provide adequate screening in the 5,000' zoning area. Additionally, landscaping and building design standards will be needed for commercial developments along this important corridor.

##### Rationale

US 82 will be the main entry into the lake community. In order to attract desirable development, the highway frontages should be well-designed and built with quality materials. If left unchecked, the highway corridor can quickly develop a cluttered appearance with low-quality development.

# How to Implement Chapter 4: Transportation Plan

## 1. Adopt County-Wide Thoroughfare Plan

### Action

The County should adopt a County-wide Thoroughfare Plan that addresses roadway needs across the County.

### Rationale

A County-wide perspective would help address regional and local issues, such as ensuring that the LBCR area is appropriately connected to the region.

## 2. Coordinate with TxDOT

### Action

The County should coordinate with TxDOT for opportunities of cost-sharing and prioritization of roadway improvements.

### Rationale

With the adoption of this Plan, County leaders now have another tool to use in discussions with TxDOT. This Plan can be used to show where future growth will occur and to request funding participation from TxDOT.

## 3. Amend the County's Subdivision Ordinance

### Action

Amend the County's subdivision ordinance to apply the recommended roadway rights-of-way.

### Rationale

As development occurs and land is subdivided, developers must dedicate right-of-way for roadways in accordance with the subdivision ordinance. Therefore, it is critical to amend the ordinance to ensure the rights-of-way are dedicated.

## 4. Promote Commercial Development along Primary Roadways

### Action

If the County is involved in partnerships or agreements regarding land development, then land along the Primary corridors should be developed first according to the Future Land Use Plan and Map.

### Rationale

It is desirable to allow land along the primary corridors to develop to take advantage of existing roadway infrastructure and to allow for faster responses from emergency services.

## 5. Plan for Secondary and Roadway Improvements

### Action

While the need for roadway improvements may be years away, the County should assess which roadways, if improved, are needed to promote the desired development.

### Rationale

In order to attract the quality development the County desires, the roadway infrastructure system needs to accommodate the projected uses.

## 6. Require Curbs on Local Roadways

### Action

In order to prevent the deterioration of roadway edges, curbs should be used in all residential subdivisions with new roadway construction. Curbs may be standard or ribbon design.

### Rationale

As a road ages, the edges can become cracked and broken. This is common in rural areas where curbs are not typically used, which poses both aesthetic and safety issues. Aesthetically, these roads are unappealing and can detract from the appearance and value of a neighborhood. The main safety concern is that vehicles tend to travel in the center of roads to avoid being next to the edge and can create situation where two vehicles cannot pass each other at the same time.

# How to Implement Chapter 5: Parks, Recreation, Trails, and County Connectivity Plan

## 1. Program and Prioritize Park Sites

### Action

The parks sites should be programed (e.g., determined by type of facilities) and prioritized in order of first to be developed.

### Rationale

The Plan shows park sites around the lake; however, a more detailed analysis should be performed regarding the type of facilities and activities that should occur at each park site. For example, some park sites may be well suited as a nature preserve with natural habitat for bird watching, while other sites may be more suited for playground facilities and picnic areas. Once the park sites have been programed, the sites should be prioritized to determine which park site should be constructed first.

## 2. Coordinate Trail Construction

### Action

Trail construction will occur over several decades, but the County should reach out to landowners and easement holders regarding the future development of trails.

### Rationale

Trail construction and the acquisition of land or the right to build a trail can take decades. Trails around the LBCR will most likely only occur when a landowner develops the property. The other means that trails will be constructed are within roadway rights-of-way or within parks.

## 3. Utility Line Trail

### Action

As land is developed along the utility corridor, the County should make efforts to develop a trail within the utility easement. If possible, the County should investigate purchasing the land within the utility easement from the property owners. Generally, most property owners when developing the land would likely be favorable to selling the land with the easement because the land will never be developable due to easement restrictions.

### Rationale

Finding trail corridors that are already cleared and ready for use is a difficult task. Generally, utility easements are used for trail locations because the land is free and clear of any obstacles. Additionally, they are used for trail locations because utility easements typically run through areas that are beneficial to connect by trails (i.e., residential developments to nonresidential development).

#### 4. Plan for Regional Trail Connections

##### Action

Plan to connect LBCR with the future Lake Ralph Hall and the Northeast Texas Trail (NETT).

##### Rationale

In order to make the recreation areas unique and desirable, a regional connection to the future Lake Ralph Hall and NETT is needed. Regional trails offer opportunities to connect Fannin County's two major recreational features (LBCR and Lake Ralph Hall). Honey Grove and Ladonia are connected by SH 34, but were also once connected by the "Old Bob" rail line. This rail line was abandoned over 70 years ago, but evidence of its location remains. The highway, or old rail line, could be a major recreational opportunity to connect the two lakes.

#### 5. Plan for Trails along Certain Roadways

##### Action

Utilize the trails map when new roadways are being constructed to ensure trails are constructed in the right-of-way.

##### Rationale

Trail construction and locations can be difficult issues to address. If the construction of a trail can be timed with construction of a roadway and built within the right-of-way, then there are fewer complications with site selection and funding.

#### 6. Develop a Park Planning Commission

##### Action

Develop a park planning commission to be charged with the oversight of the development of the County's recreational system.

##### Rationale

This will help to ensure that the planning of the recreational system is strategically coordinated.

# How to Implement Chapter 6: Lake Edge Development Standards

## 1. Continue Partnerships with NTMWD to Ensure Quality Boat Docks

### Action

Continually work with NTMWD to ensure that quality boat dock facilities are being constructed and update the Comprehensive Plan if needed to address any unforeseen issues with boat dock construction.

### Rationale

The NTMWD will be the sole entity responsible for permitting boat docks on the lake, but the County may assist NTMWD in implementing and enforcing NTMWD's regulations for such boat docks. The County's responsibility is to set the vision for the quality of the development on the lake. Having NTMWD as a partner to ensure quality development is the best method for promoting the vision for the lake.

## 2. Work with Water and Wastewater Providers to Extend Lines

### Action

To encourage water and wastewater lines to service the LBCR area, the County should coordinate with local providers in an effort to provide services to the area. This will help to avoid the use of wells and septic systems, since septic systems can pose a hazard to water quality.

### Rationale

Water/wastewater providers, such as Municipal Utility Districts (MUDs) or Water Supply Corporations (WSCs), provide services to the LBCR area. With a quality infrastructure system from the providers, land will be better able to handle development than if left to develop on wells and septic systems. Wells can be suitable for rural residential use, but may not be adequate for fire protection in a subdivision. Septic systems can fail if not properly maintained and can pollute the lake, as has been the case in other Texas lakes.

## 3. Incentivize Connecting to Water and Wastewater System

### Action

The County should investigate incentives for developers to connect homes to centralized water and wastewater systems. These incentives could include participation in roadway improvements or other public infrastructure improvements that will help benefit water quality.

### Rationale

Since the County is not a water or wastewater provider, its authority is somewhat limited regarding water and wastewater planning. Incentives can be one element that can help supplement the County's zoning and subdivision authority. According to State law, approved septic tanks cannot be prohibited on properties one acre or larger; however, the use of centralized wastewater systems is highly encouraged.



## 4. Educate Property Owners on Marina Sites and Boat Docks

### Action

Since only three marinas are shown on the Future Land Use Plan, the County should work closely with the property owners in the zoning process and help educate owners regarding the vision for the lake and help with coordination with NTMWD. Additionally, residential property owners should be educated to ensure quality boat dock development and stream bank stabilization.

### Rationale

In lake edge developments that include access to the lake, there will always be at least three groups involved in development - the property owners, NTMWD, and the County. These three groups all have an interest in seeing quality development around the lake. The County should be focused on educating the public and coordinating with owners and NTMWD.

## 5. Prohibit Dumping and Open Storage Adjacent to the Lake

### Action

Establish zoning regulations to prohibit dumping of tires and other debris and open storage adjacent to the lake.

### Rationale

The vision for the lake is one of high quality. The public expressed that some lakes in Texas have not been well kept. These lakes have a very negative image with poor quality development, which is what the public and County seeks to avoid with the LBCR.

# Summary | Implementation Plan

The following are the top ten implementation actions in order of importance. The actions should be pursued with the adoption of this comprehensive plan.

## Top Priorities for Implementation:

1. Adopt Zoning Regulations (FLUP #1)
2. Utilize the Full Boundaries of the Zoning Authority (FLUP #2)
3. Continue Partnerships with NTMWD to Ensure Quality Boat Docks (Lake Edge #1)
4. Program and Prioritize Park Sites (Parks #2)
5. Work with Water and Wastewater Providers to Extend Lines (Lake Edge #2)
6. Plan for Regional Trail Connections (Parks #5)
7. Coordination for New Lake Parks (FLUP #3)
8. Plan for Trail along Certain Roadways (Parks #7)
9. Amend the County's Subdivision Ordinance (Transportation #3)



# Appendix

---

## Acknowledgements

Thank you to the following people for contributing to the development of this Comprehensive Plan:

### Fannin County Judge

Creta L. Carter II

### Fannin County Commissioners

Gary Whitlock, Precinct 1

Stanley Barker, Precinct 2

Jerry Magness, Precinct 3

Dean Lackey, Precinct 4

### Fannin County Zoning Commissioners

Gary Fernandes

David Johnson

Dustin Knight

Bob McCraw

### Fannin County Staff

Leah Gibby, Executive Assistant to the County Judge

Rita Watts, Former Executive Assistant to the County Judge

## Consultant Team | Freese and Nichols

Dan Sefko, FAICP, Project Director

Daniel Harrison, AICP, Project Manager

Chelsea Irby, Project Planner

Bryan Gant, GIS Mapping/Analyst

Mireya Varela, Planning Support


## Mapping

All maps found in this Comprehensive Plan can also be found in this appendix.

## Online Comments

All comments submitted through the project website can be found in this appendix.

# Lower Bois d' Arc Creek Reservoir Neighboring Counties

 Texas Counties

Oklahoma

*Future  
Lower Bois d' Arc Creek  
Reservoir*

Grayson  
County

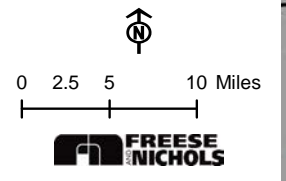
Fannin  
County

Lamar  
County


Delta  
County

Collin  
County

Hunt  
County



0 2.5 5 10 Miles

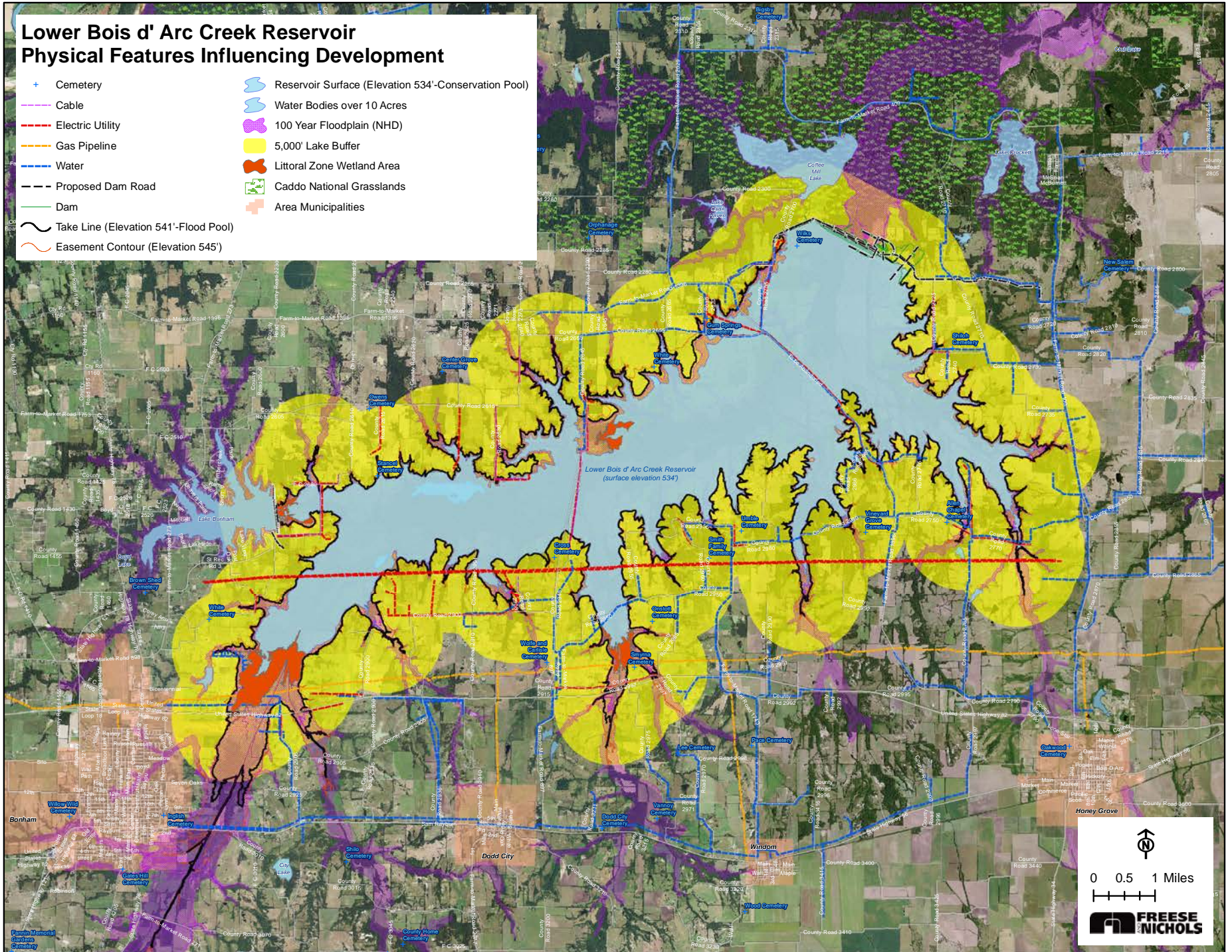


**FREESE  
NICHOLS**



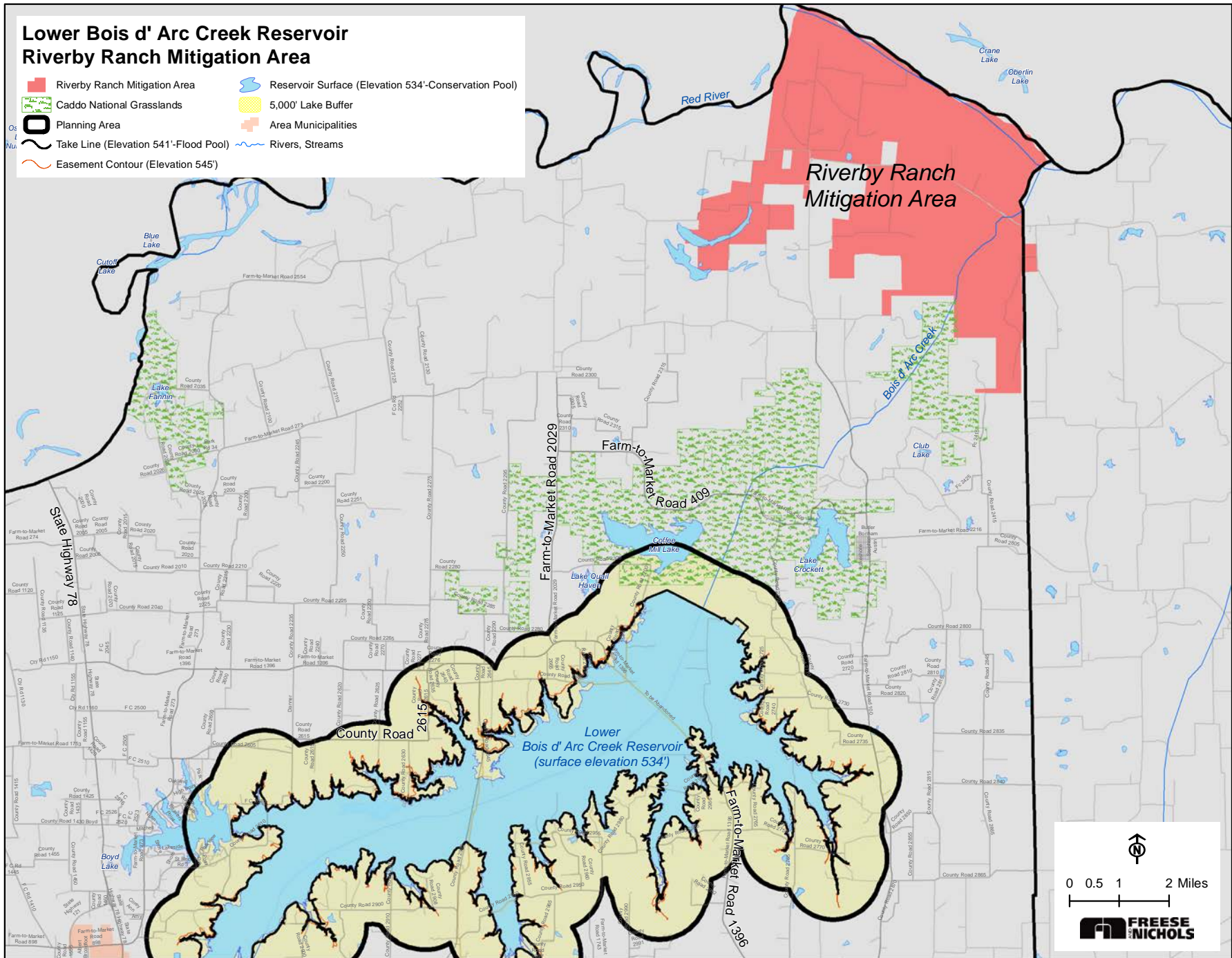
# Lower Bois d' Arc Creek Reservoir Physical Features Influencing Development

- + Cemetery
- Cable
- - - Electric Utility
- Gas Pipeline
- Water
- - - Proposed Dam Road
- Dam
- ~ Take Line (Elevation 541'-Flood Pool)
- ~ Easement Contour (Elevation 545')
- Reservoir Surface (Elevation 534'-Conservation Pool)
- Water Bodies over 10 Acres
- 100 Year Floodplain (NHD)
- 5,000' Lake Buffer
- Littoral Zone Wetland Area
- Caddo National Grasslands
- Area Municipalities



# Lower Bois d' Arc Creek Reservoir Riverby Ranch Mitigation Area

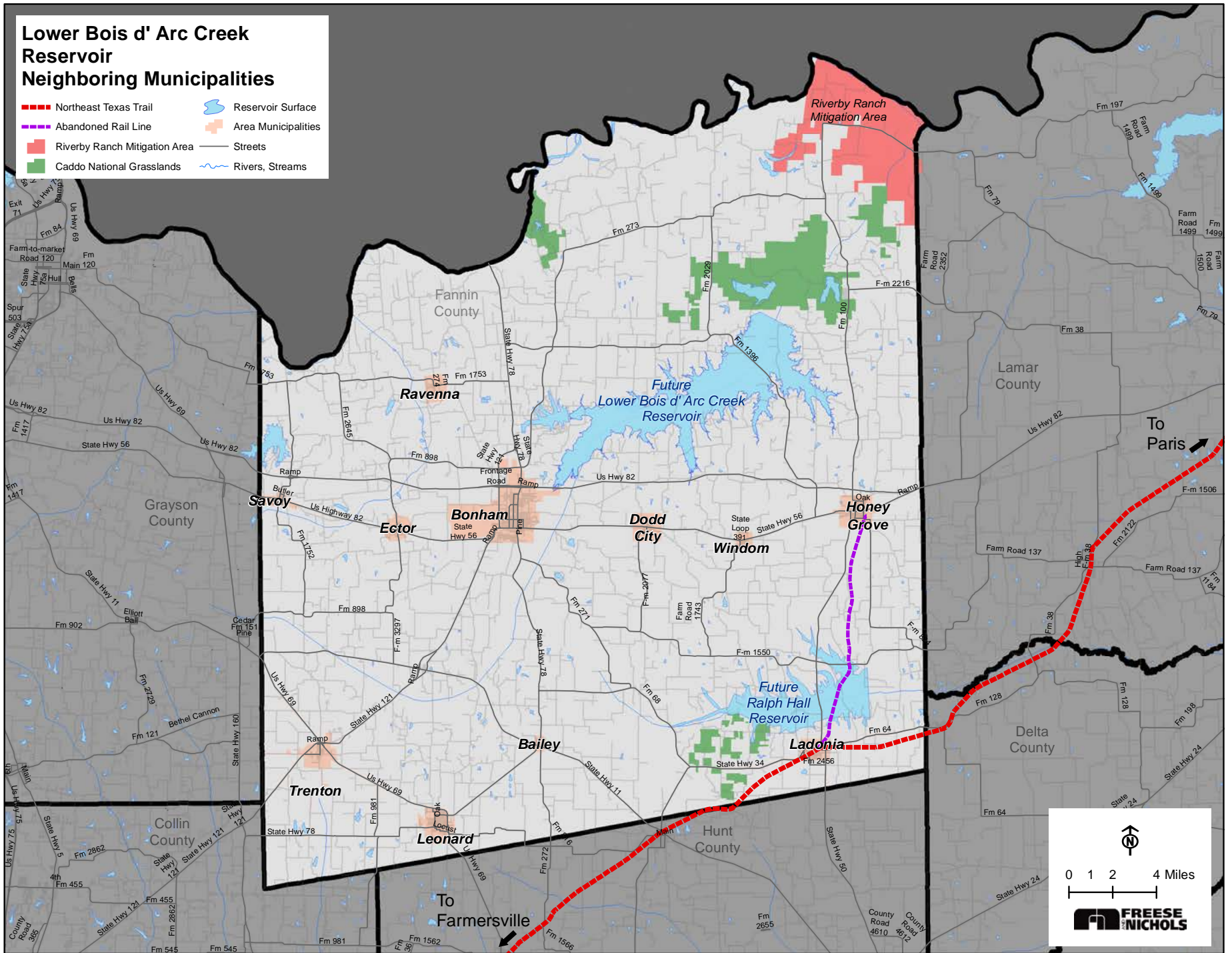
- Riverby Ranch Mitigation Area
- Reservoir Surface (Elevation 534'-Conservation Pool)
- Caddo National Grasslands
- 5,000' Lake Buffer
- Planning Area
- Area Municipalities
- Take Line (Elevation 541'-Flood Pool)
- Rivers, Streams
- Easement Contour (Elevation 545')





# Lower Bois d' Arc Creek Reservoir Neighboring Municipalities

- ▬▬▬ Northeast Texas Trail
- ▬▬▬ Abandoned Rail Line
- Riverby Ranch Mitigation Area
- Caddo National Grasslands
- Reservoir Surface
- Area Municipalities
- Streets
- Rivers, Streams

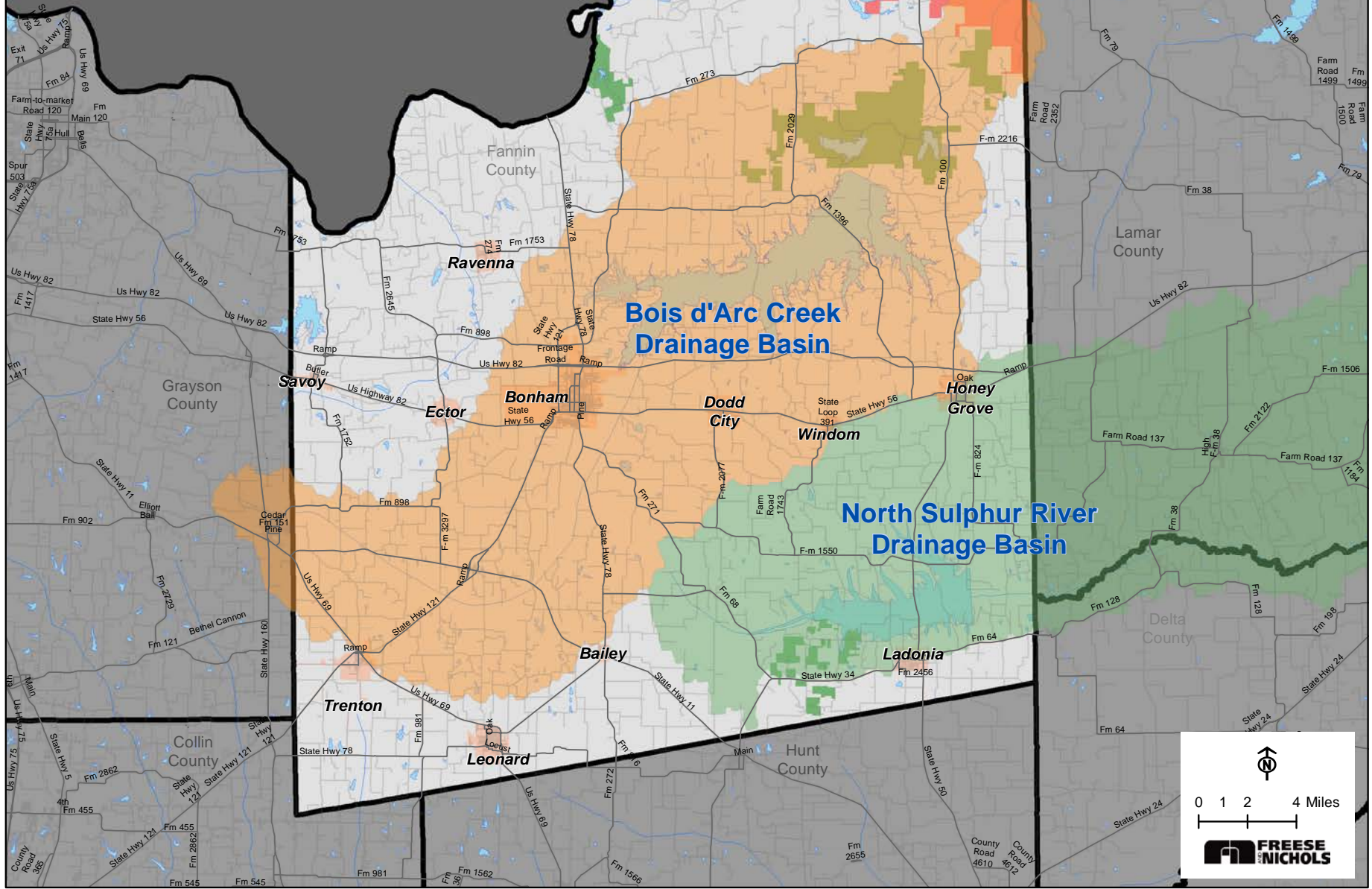



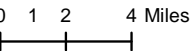

0 1 2 4 Miles

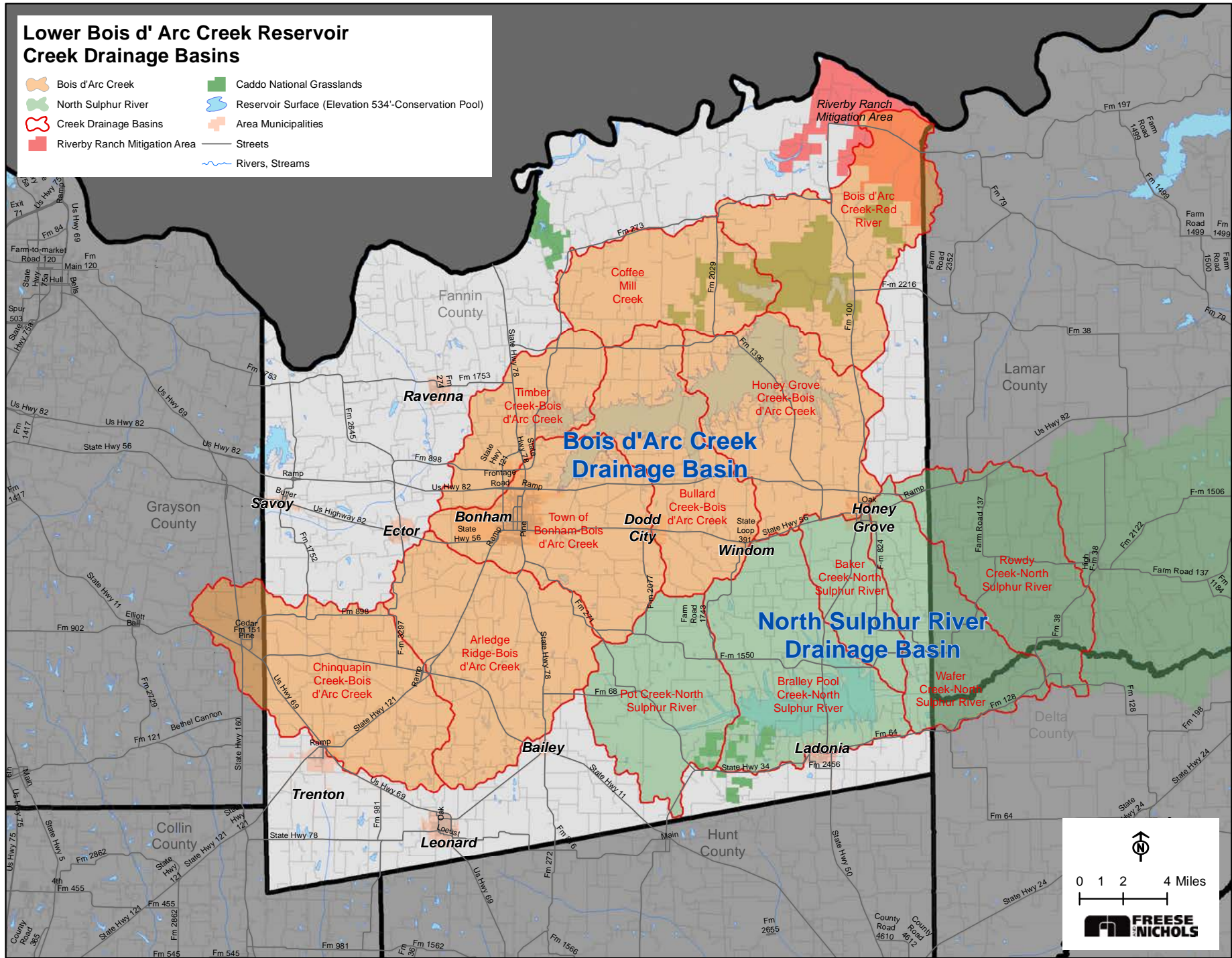
**FREES NICHOLS**

# Lower Bois d' Arc Creek Reservoir Major Drainage Basins















-  Bois d'Arc Creek
-  North Sulphur River
-  Riverby Ranch Mitigation
-  Caddo National Grasslands
-  Reservoir Surface (Elevation 534'-Conservation Pool)
-  Area Municipalities
-  Streets
-  Rivers, Streams

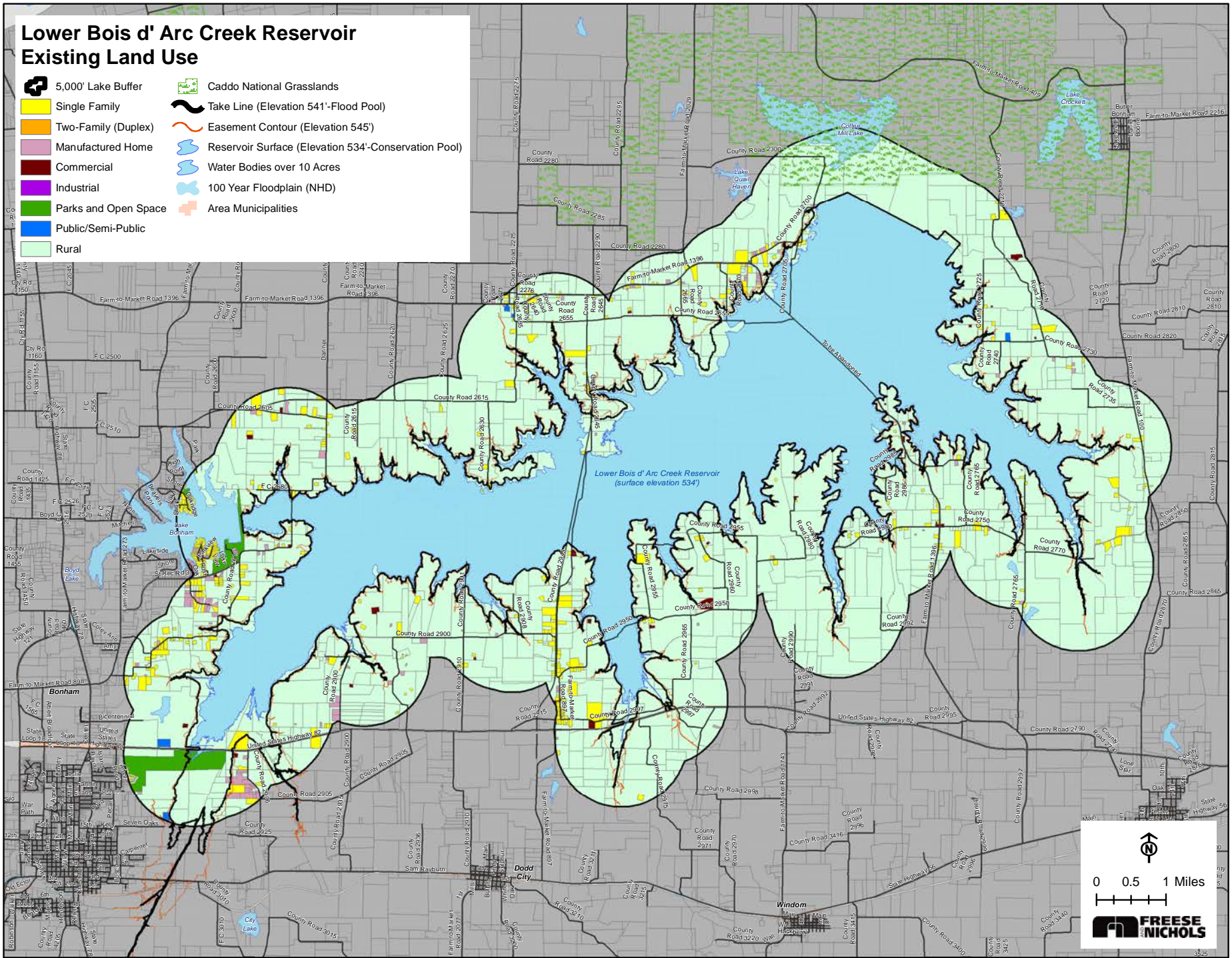


  
 0 1 2 4 Miles  
  




# Lower Bois d' Arc Creek Reservoir Existing Land Use

-  5,000' Lake Buffer
-  Single Family
-  Two-Family (Duplex)
-  Manufactured Home
-  Commercial
-  Industrial
-  Parks and Open Space
-  Public/Semi-Public
-  Rural
-  Caddo National Grasslands
-  Take Line (Elevation 541'-Flood Pool)
-  Easement Contour (Elevation 545')
-  Reservoir Surface (Elevation 534'-Conservation Pool)
-  Water Bodies over 10 Acres
-  100 Year Floodplain (NHD)
-  Area Municipalities



# Lower Bois d' Arc Creek Reservoir Future Land Use

## Land Use

- Agriculture / Open Space
- Residential (small lots)
- Residential (large lots)
- Office/Retail/Commercial
- NTMWD-Owned Property

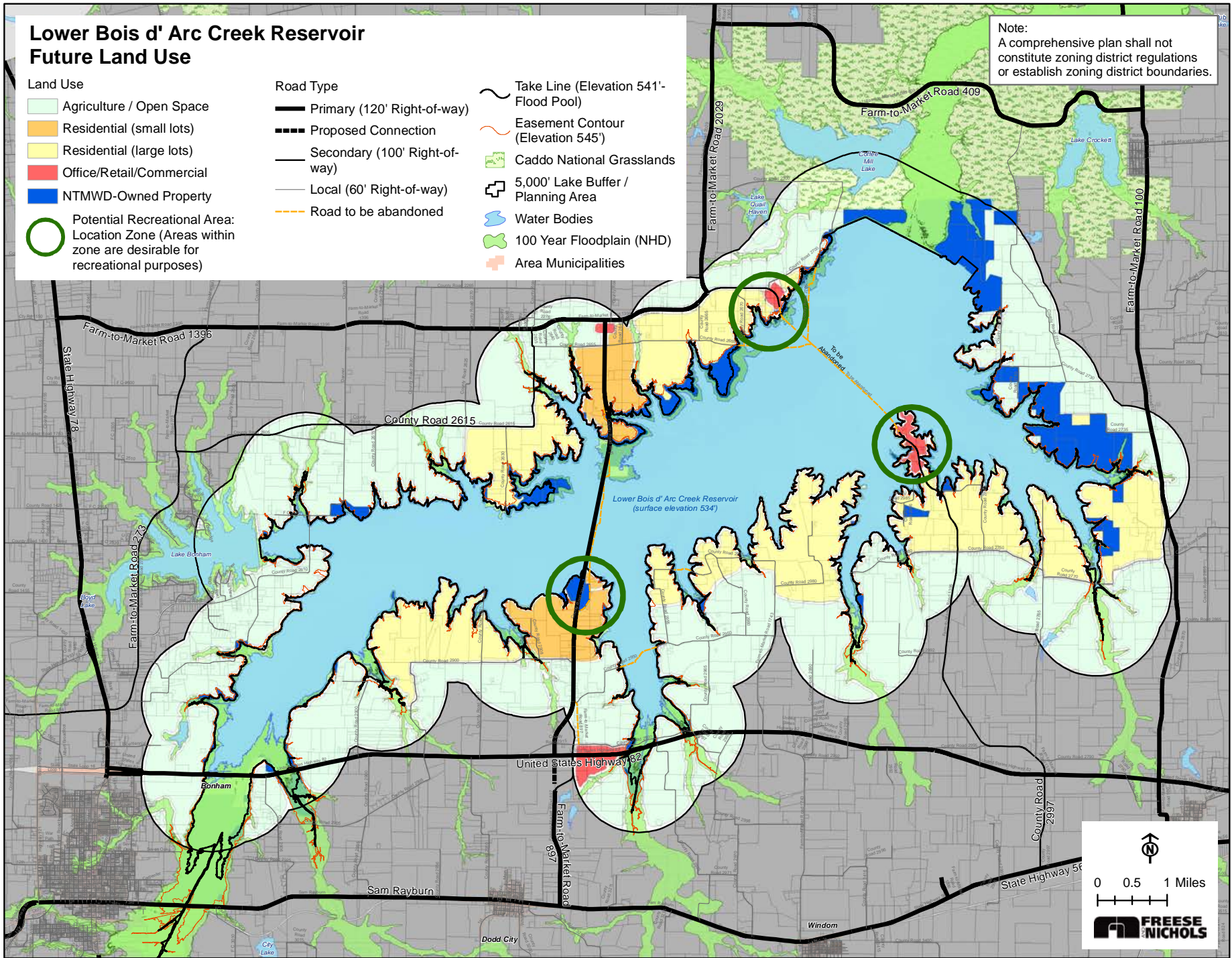
- Potential Recreational Area:  
Location Zone (Areas within zone are desirable for recreational purposes)

## Road Type

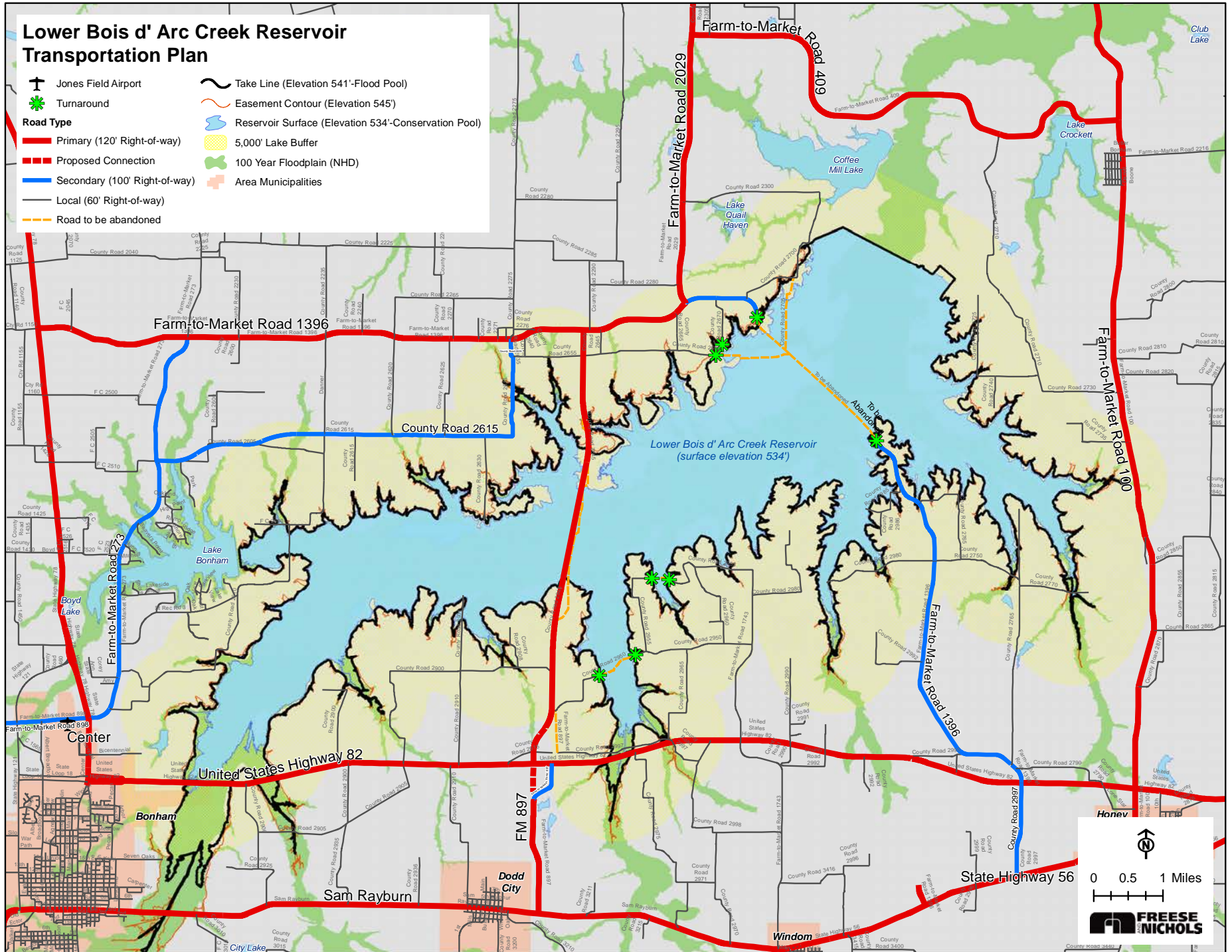
- Primary (120' Right-of-way)
- Proposed Connection
- Secondary (100' Right-of-way)
- Local (60' Right-of-way)
- Road to be abandoned

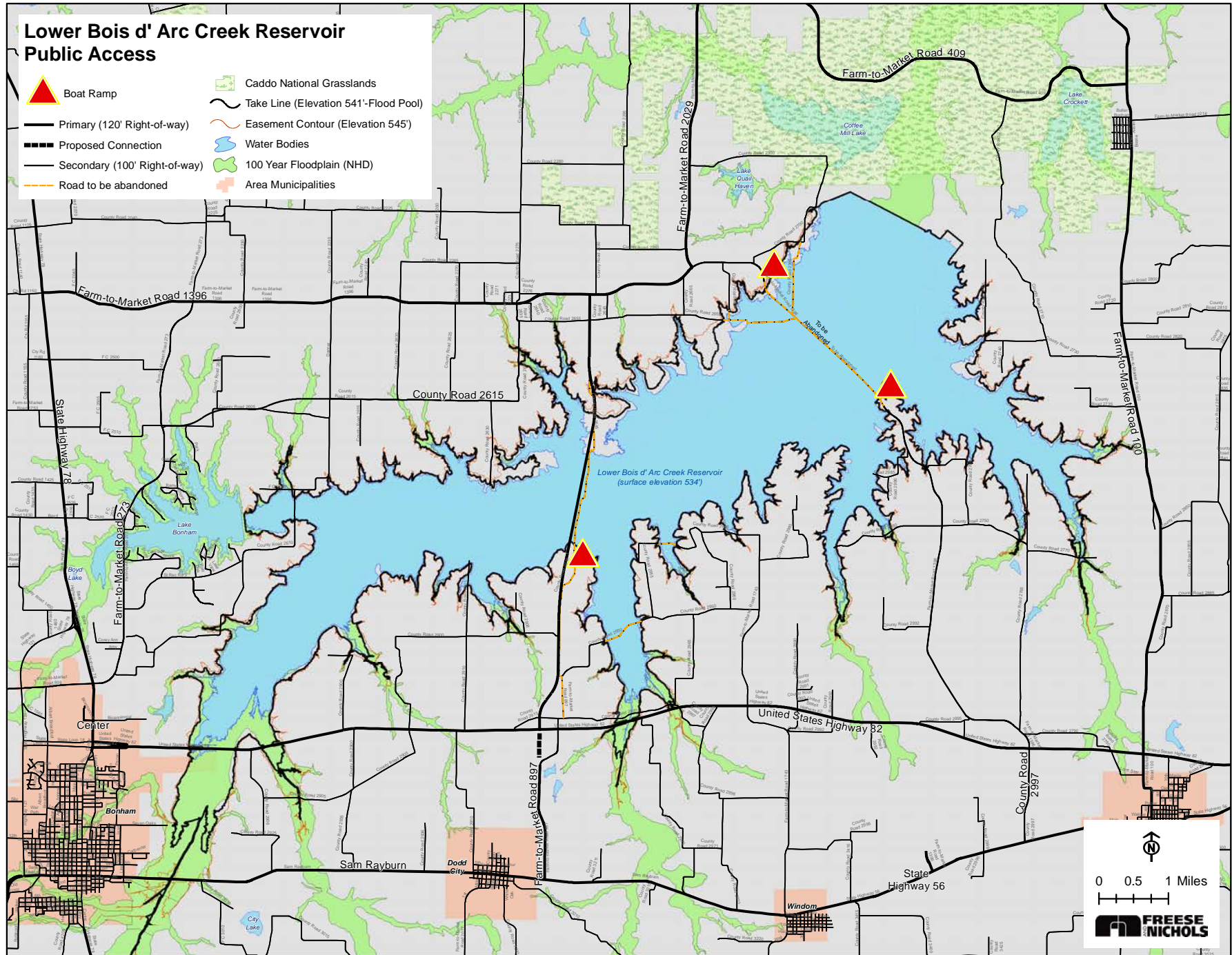
- Take Line (Elevation 541'-Flood Pool)
- Easement Contour (Elevation 545')
- Caddo National Grasslands
- 5,000' Lake Buffer / Planning Area
- Water Bodies
- 100 Year Floodplain (NHD)
- Area Municipalities

Note:  
A comprehensive plan shall not constitute zoning district regulations or establish zoning district boundaries.





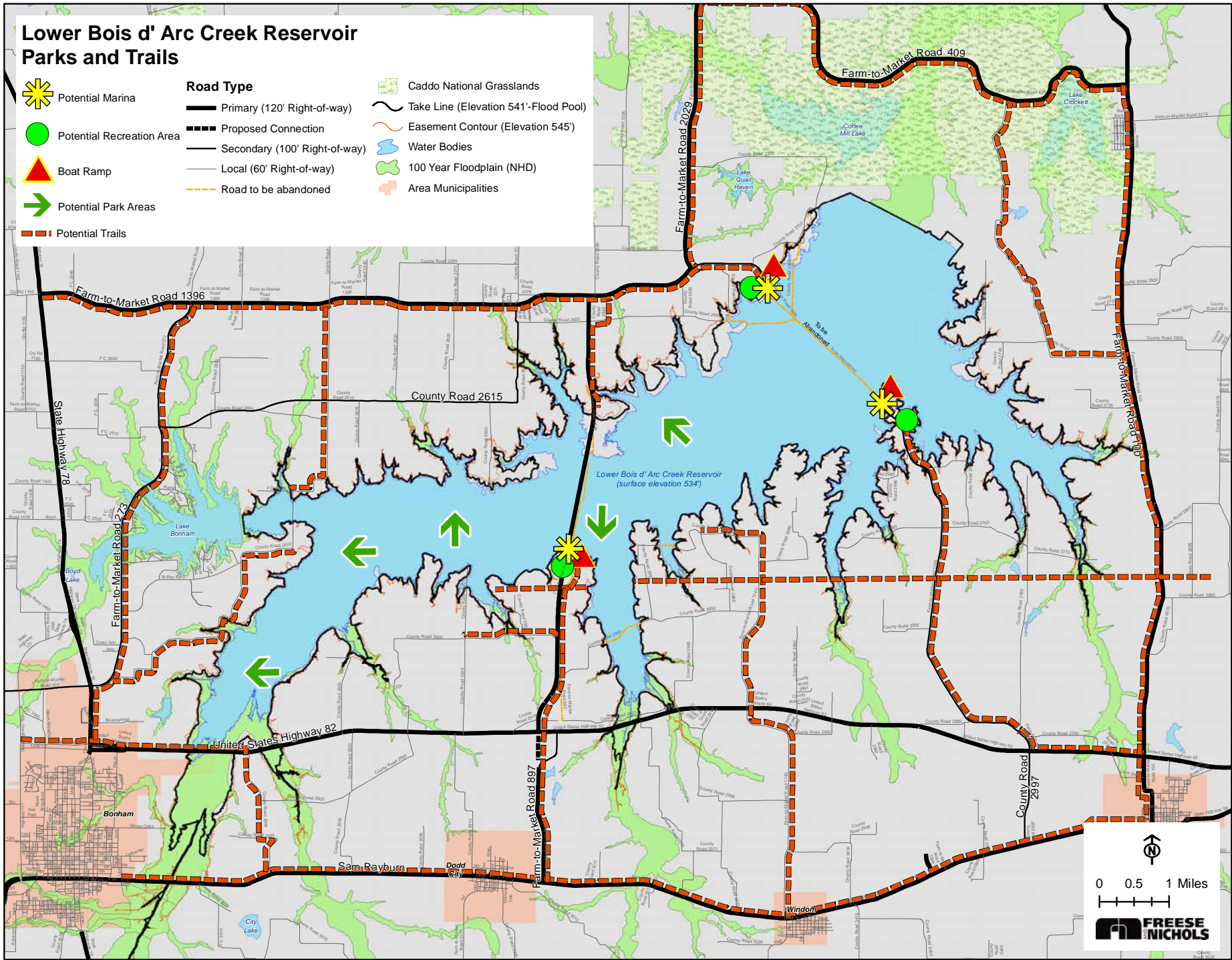






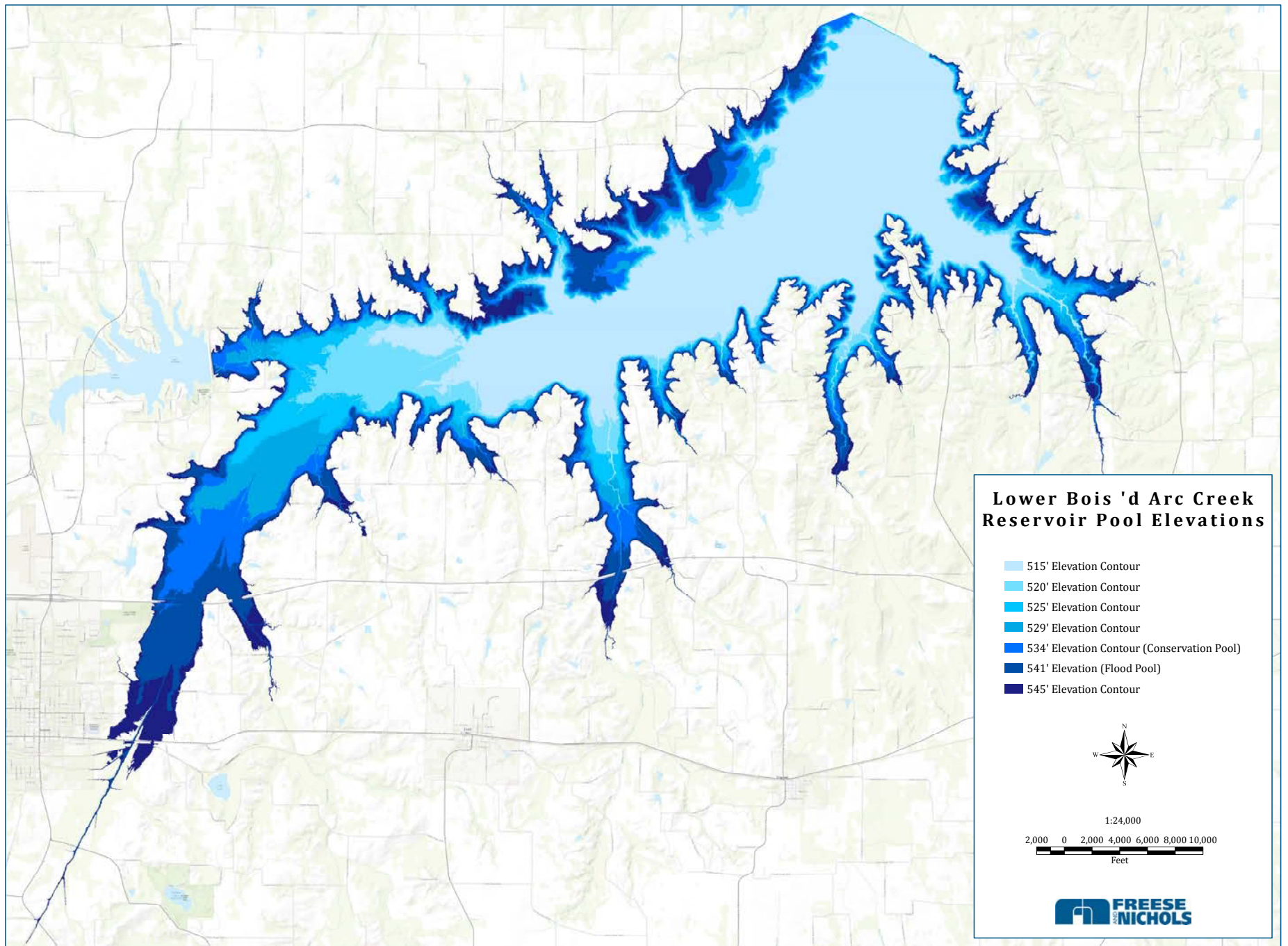
# Lower Bois d' Arc Creek Reservoir Parks and Trails

- Potential Marina
  - Potential Recreation Area
  - Boat Ramp
  - Potential Park Areas
  - Potential Trails
- Road Type**
- Primary (120' Right-of-way)
  - Proposed Connection
  - Secondary (100' Right-of-way)
  - Local (60' Right-of-way)
  - Road to be abandoned
- Caddo National Grasslands
  - Take Line (Elevation 541'-Flood Pool)
  - Easement Contour (Elevation 545')
  - Water Bodies
  - 100 Year Floodplain (NHD)
  - Area Municipalities



0 0.5 1 Miles  
  
**FREASE NICHOLS**





## Comments Received from Project Website

These comments were not edited for grammar or spelling.

1. *"I live at FM 1396 and CR 2645, and as is the case with many in this area, much of our assets are invested in our homes and property. We are near where the lake will be and don't want our property values diminished by zoning which allows bait shops and liquor stores every few feet. Neither do we want mobile home parks with houses that are deteriorated and surrounded by trash. Many here believe that the only benefit derived from this lake will go to the Metroplex and Fannin Co. citizens will lose the pastoral setting we cherish. Fannin is one of the poorest counties in the state, yet we will probably be left with the bill. In my opinion, neither Bonham officialdom nor North Texas Water are really concerned about those of us whose way of life will be most seriously affected by their actions."*
2. *"In planning how about an area for "Park Homes", TOWs (Tiny Home on Wheels)."*
3. *I own property that is on the lake front and I would like to know if owners around the lake can have their own private boat docks and boat ramps."*
4. *Where can these ideas/comments be viewed?"*
5. *"I do agree that some kind of planning makes sense. However, I did not like the Delphi Methodology employed for "input" purposes. I will continue to attend the meetings."*
6. *"The vision I have, not the one I desire, is the same thing that has happened to Delta County with even worse consequences. A county dependent on an agricultural economy that has been broken by the loss of so much farm land and tax base with no industry or tourism or anything else to take its place. A county that believed the fast talk of urban planners but had no guarantee of development which never occurs. Fannin County is giving up natural resources and getting nothing in return, so one could not hope for much of a bright future. The vision I have is of a financially broke county struggling with a constantly low water supply reservoir that yield nothing but more expenses for the county. No development, no tourism, nothing but added cost and no recourse."*
7. *"Zone a major park facility where entry to the facilities are made off of CR 2610. The traffic flow will hub from Bonham at highways 78/121, to 273 to Park Rd 3 to CR 2610 and build a modern park that will attract tourism and serve the citizens of Fannin County.
  - a. *Why is this request important? – (1) Position's Bonham/Fannin County seat as a hub for lake activities using the major highway from the Metroplex, point west of Bonham and Bonham residence a western access to the lake. With the creation of Lake Ralph Hall, Bonham is well position to be the hub for Fannin County. (2) Leverages and integrates existing city facilities/resources, example Lake Bonham Recreational Area, with the economic growth from the lake. (3) The tourism revenue is important to the City of Bonham, it's businesses and its residence. (4) Park facilities can be an economic engine for years and can be enjoyed by local residents year round. (5) The park location does not require the**

*construction of a bridge over the water. (6) The facilities construction will cost the least if planned and executed before the lake fills.*

*b. Key requirements – (1) Must guarantee navigable water for boating from the park to the dam, down to the 500 year drought line. (2) The boat ramp must be deep enough to launch down to the 500 year drought line. (3) The facilities can be situated along the banks of Timber Creek and the boating lanes can be developed along the Timber creek to Bois d’Arc Creek channels from there anywhere on the lake. (4) Must team up with Texas Parks and Wildlife to influence the quality of the fishery. (5) The area behind Lake Bonham dam can be planned with hiking trails, bird watching and access to duck hunting which will bring value to areas not normally used around lakes. (6) Overnight stay facilities able to support charging boat batteries for overnight guest.*

*c. Examples – (1) Lake Fork is a good example of how the fishing industry has transform the economics around the lake and surrounding communities, but yet the communities were able to maintain their rural character. (2) Lake Ray Roberts is an example of how the Texas Parks and Wildlife regulations has an impact on the fishing economics. By setting the black bass length requirements to 14”, the community has seen tourism traffic increase from when the lake had a big fish slot. (3) Humphrey Pavilion on Lake Sam Rayburn. (4) Anderson County, South Carolina’s new Green Pond Landing & Event Center is a 221-foot by 50-foot high capacity mega-ramp.”*

*8. It will not prosper Fannin County at all it is taking tax revenue away and taking good farming land away from area farmers. Bonham sold the*

*residents of our county out. They will learn this soon after.*



**Prepared by Freese and Nichols, Inc.**  
2711 N. Haskell Ave.  
Suite 3300  
Dallas, TX 75204