Chapter 8

Unique Stream Segments, Unique Reservoir Sites, and Legislative and Regulatory Recommendations

This chapter of the 2021 East Texas Regional Water Plan (2021 Plan) addresses unique stream segment designation, unique reservoir site designation, and water planning recommendations to the Texas Legislature. Information relevant to these issues was considered by the East Texas Regional Water Planning Group (ETRWPG) and the group voted on each issue.

8.1 Unique Stream Segments

According to §357.43(1) of the Texas Administrative Code, the ETRWPG is obligated to consider potential river or stream segments as being of unique ecological value based upon the following criteria set forth in §358.2(6):

(1) **Biological function** – stream segments that display significant overall habitat value including both quantity and quality considering the degree of biodiversity, age, and uniqueness observed and including terrestrial, wetland, aquatic, or estuarine habitats;

(2) **Hydrologic function** – stream segments that are fringed by habitats that perform valuable hydrologic functions relating to water quality, flood attenuation, flow stabilization, or groundwater recharge and discharge;

(3) **Riparian conservation areas** – stream segments that are fringed by significant areas in public ownership including state and federal refuges, wildlife management areas, preserves, parks, mitigation areas, or other areas held by governmental organizations for conservation purposes, or stream segments which are fringed by other areas managed for conservation purposes under a governmentally approved conservation plan;

(4) **High water quality/exceptional aquatic life/high aesthetic value –** stream segments and spring resources that are significant due to unique or critical habitats and exceptional aquatic life uses dependent on or associated with high water quality; or

(5) **Threatened or endangered species/unique communities –** sites along streams where water development projects would have significant detrimental effects on state or federally listed threatened and endangered species; and sites along streams significant due to the presence of unique, exemplary, or unusually extensive natural communities.

To assist the ETRWPG with identifying potential stream segments for designation, the Texas Parks and Wildlife Department (TPWD) developed a report[1] in 2005 of ecologically significant river and stream segments in the East Texas Regional Water Planning Area (ETRWPA). The TPWD report identified 41 river and stream segments in the ETRWPA as possibly ecologically significant. A map prepared by TPWD showing the locations of the 41 river and stream segments is presented on Figure 8.1.

The planning rules do not provide guidance on how many of the criteria need to be met as a prerequisite for consideration for designation as a unique stream segment. As an initial screening tool, the ETRWPG determined that those segments that meet three or more of the criteria would be further evaluated.

Only 11 of the 41 segments have three or more applicable criteria. Table 8.1 presents a summary of the 41 segments identified by TPWD and indicates which of the five criteria are identified by TPWD for each segment. Some of the segments are categorized as having threatened or endangered species or unique communities. The specific threatened or endangered species or unique community that is the basis for this categorization is presented in Table 8.2.

The intent of the Texas Legislature regarding the purpose of the unique stream segment designation is stated in Section 16.051(f) of the Texas Water Code:

> *This designation solely means that a state agency or political subdivision of the state may not finance the actual construction of a reservoir in a specific river or stream designated by the legislature under this subsection.*

Based on this section of the law, it would be irrelevant to consider recommending a segment for designation if it does not have potential to be a reservoir site.

There continues to be concern among many regional water planning groups (including the ETRWPG) that designation of a stream segment might lead to unwarranted restrictions on the use of the segment, including water diversions and discharges of treated effluent. During the previous round of regional water planning, representatives of Region C met with Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board (TWDB), and TPWD to discuss potential issues related to restrictions associated with unique stream segment designation.

Seven of the 11 stream segments identified for further evaluation are not currently considered as potentially suitable for reservoir construction. Therefore, these segments have been eliminated from further consideration at this time. These segments are as follows:

- Alazan Bayou
- Upper Angelina River (Segment 0611; Nacogdoches County)
- Lower Angelina River (Segment 0611; Nacogdoches County)
- Big Sandy Creek (Segment 0608B)
- Catfish Creek (Segment 0804G)
- Trinity River (Segment 0803/0804)
- Village Creek (Segment 0608)

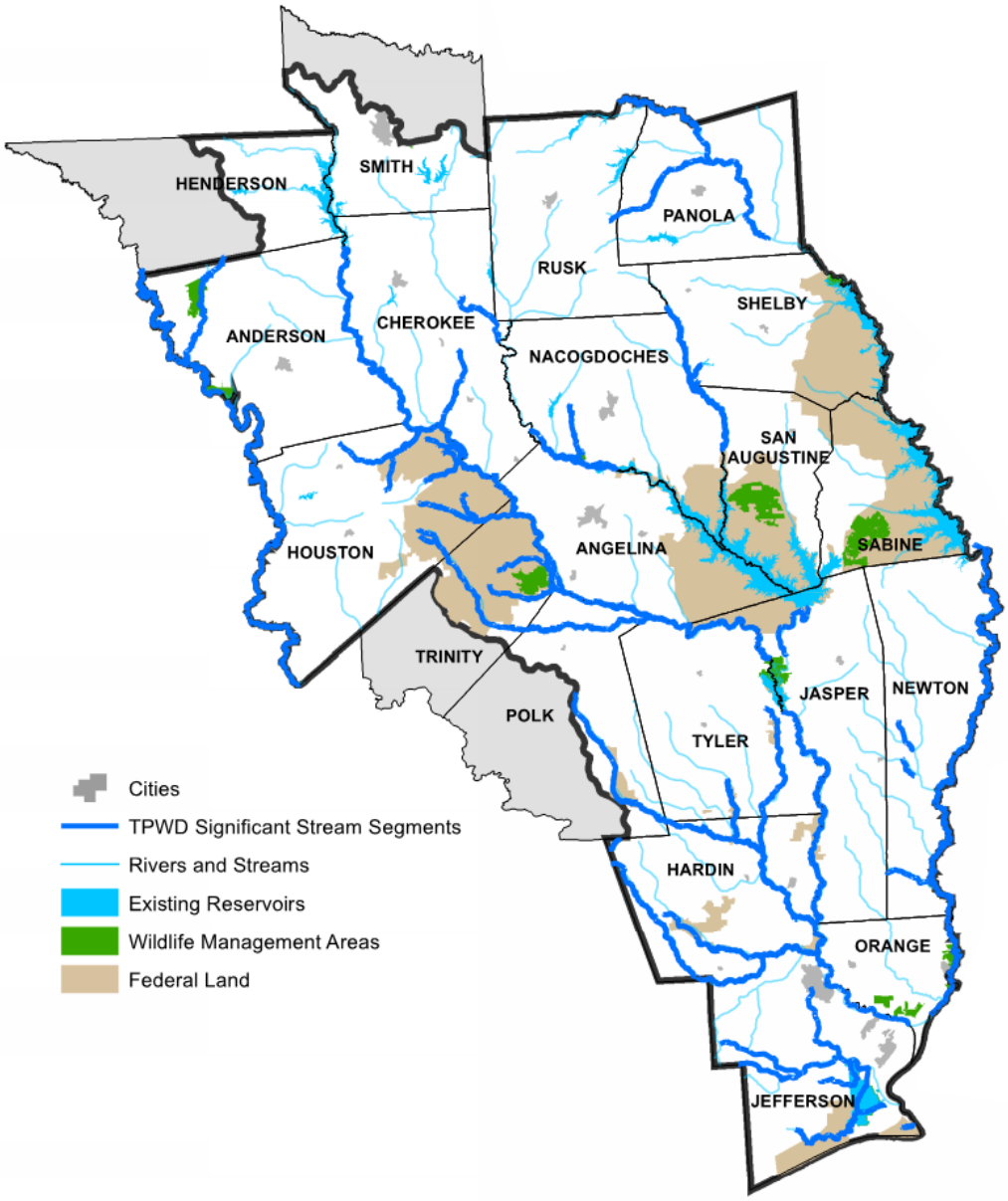

Figure 8.1 Texas Parks and Wildlife Department Ecologically Significant Stream Segments

SOURCE: TEXAS PARKS AND WILDLIFE DEPARTMENT

Table 8.1 Texas Parks and Wildlife Department Ecologically Significant River and Stream Segments

River or Stream Segment	Biological Function	Hydrologic Function	Riparian Conservation Area	High Water Quality/Aesthetic Value	Endangered Species/Unique Communities	Total # of Criteria Met
Alabama Creek			•			1
Alazan Bayou	•		•		•	3
Upper Angelina River	•		•		•	3
Lower Angelina River	•		•		•	3
Attoyac Bayou					•	1
Austin Branch			•			1
Beech Creek			•	•		2
Big Cypress Creek				•		1
Big Hill Bayou	•		•			2
Big Sandy Creek	•		•	•	•	4
Bowles Creek			•			1
Camp Creek			•		•	2
Catfish Creek			•	•	•	3
Cochino Bayou			•			1
Hackberry Creek			•		•	2
Hager Creek			•			1
Hickory Creek			•			1
Hillebrandt Bayou			•			1
Irons Bayou				•		1
Little Pine Island Bayou			•			1
Lynch Creek			•		•	2
Menard Creek			•			1
Mud Creek	•				•	2
Upper Neches River	•		•	•	•	4
Lower Neches River	•		•	•	•	4
Pine Island Bayou			•			1
Piney Creek			•	•	•	3
Upper Sabine River	•			•	•	3
Middle Sabine River	•			•		2
Lower Sabine River	•		•			2
Salt Bayou	•		•			2
San Pedro Creek			•			1
Sandy Creek (Trinity Co.)			•		•	2
Sandy Creek (Shelby Co.)					•	1
Taylor Bayou			•			1
Texas Bayou			•			1
Trinity River	•		•		•	3
Trout Creek			•			1
Turkey Creek			•			1
Village Creek	•		•	•	•	4
White Oak Creek				•		1

Table 8.2 Texas Parks and Wildlife Department Threatened and Endangered Species/Unique Communities

Threatened / Endangered Species	Angelina River	Big Sandy Creek	Catfish Creek	Upper Neches River	Lower Neches River	Piney Creek	Sabine River	Trinity River	Village Creek
Paddlefish	●			●	●		●		
Creek chubsucker				●		●			
Sandbank pocketbook freshwater mussel					●				
Texas heelsplitter freshwater mussel					●			●	
Neches River rose-mallow				●					
Rough-stem aster			●						
Unique community		●							●

Four segments include reaches that have been identified as potentially suitable for a reservoir site.

- Upper and Lower Neches River (Segment 0601/0602/0604) – Rockland Reservoir
- Piney Creek (Segment 0604D) – Rockland Reservoir
- Upper Sabine River (Segment 0505; Panola County) – Lake Stateline and Lake Carthage

Limited information exists on the relative value of using these sites for a reservoir compared to maintaining a riverine environment. Prior to proceeding with the construction of a reservoir at any of these sites, extensive environmental studies must be conducted to determine the extent and nature of potential environmental impacts and whether these impacts can be effectively mitigated. The information obtained through such environmental studies is the type of data needed to provide a basis for decisions regarding the relative merits of constructing a reservoir or preserving a riverine environment.

No regulatory purpose has been identified that would be served by a unique stream segment designation, other than precluding reservoir construction. Indeed, there are currently extensive regulations and programs to protect the environment in the ETRWPA.

The ETRWPA has a high proportion of land that has been assigned a special protective status; this land is summarized in Table 8.3 below. In addition to the land shown below, there are a number of state parks, state historic sites, and the Alabama and Coushatta Indian Reservation.

Areas of the ETRWPA that are not part of a state or federal preserve are also protected by various regulatory programs that require environmental assessments for activities that could adversely affect the environment.

Table 8.3 Land with a Special Protective Status

Name	Acreage
Alabama Creek Wildlife Management Area	14,600
Alazan Bayou Wildlife Management Area	2,100
Angelina National Forest	153,200
Big Lake Bottom Wildlife Management Area	4,100
Big Thicket National Preserve	106,300
Davy Crockett National Forest	160,600
E.O. Siecke State Forest	1,700
Engeling Wildlife Management Area	11,000
J.D. Murphree Wildlife Management Area	24,300
Lower Neches Wildlife Management Area	8,000
McFaddin and Texas Point National Wildlife Refuges	67,800
Neches National Wildlife Refuge	25,000*
Sabine National Forest	160,900
Tony Houseman Wildlife Management Area	3,300

***The current size of the Neches National Wildlife Refuge is 35 acres; ongoing land acquisitions will potentially expand the refuge to 25,000 acres.**

At its regularly scheduled meeting in January 2015, the ETRWPG considered the above information and voted not to recommend any stream segments in the region for unique status. The ETRWPG concluded that sufficient programs are already in place to protect the regions streams from inappropriate reservoir construction. In addition, the ETRWPG prefers to allow the TWDB to study issues associated with unique stream segment designation before further considering potential designations in the ETRWPA. The ETRWPG did not rescind this determination from the January 2015 meeting during the current round of planning.

8.2 Unique Reservoir Sites

Regional water planning guidelines allow regional water planning groups to recommend sites of unique value for construction where:

(1) Site-specific reservoir development is recommended as a specific water management strategy; or

(2) The location, hydrologic, geologic, topographic, water availability, water quality, environmental, cultural, and current development characteristics, or other pertinent factors make the site uniquely suited for reservoir development to provide water supply.

The ETRWPA has a long history of water supply planning and reservoir development. Numerous sites have been identified as being hydrologically and topographically ideal for reservoir development. Two sites in the ETRWPA are currently designated as unique reservoir sites: Lake Columbia and Fastrill Reservoir.

Fastrill Reservoir was designated by the 79th Legislature through 2007 Texas Legislature Senate bill 3. Lake Columbia received its unique designation by the State Legislature, Senate Bill 1362. Lake Columbia is currently being pursued for development. The ETRWPG fully supports the designation of these two reservoir sites as unique.

The ETRWPG considered other potential reservoir sites for possible designation as unique but did not recommend any additional sites. The considered sites are described in Sections 8.2.2 through 8.2.12 below. The ETRWPG agrees with past evaluations of these sites as being hydrologically and topographically unique for reservoir construction. The ETRWPG recognizes that reservoirs can have major impacts on the environment and that protection of the environment is already afforded through a process that is more thorough than the regional water planning effort. The ETRWPG is not recommending these additional sites (i.e., the proposed reservoirs other than Lake Columbia and Lake Fastrill) be designated as unique reservoir sites. The ETRWPG is recommending that these sites be recognized as potential long-term water management strategies for the time period more than fifty years in the future. The ETRWPG believes that the lengthy and thorough economic and environmental review process will determine if any of these reservoirs are constructed as opposed to any decision by the ETRWPG.

The ETRWPG has voted in previous rounds of planning to not recommend any proposed reservoir sites as unique. Proposed sites, including the two sites already designated as unique, are included in Table 8.4, following.

Table 8.4 Potential Reservoirs for Designation as Unique Reservoir Sites

Major Water Provider	Reservoir Site
Angelina Neches River Authority	Lake Columbia (Already Unique Site)
	Ponta
Lower Neches Valley Authority	Rockland Reservoir (Alternative WMS)
Sabine River Authority	Big Cow Creek
	Bon Wier
	Carthage Reservoir
	Kilgore Reservoir
	Rabbit Creek
	State Hwy. 322, Stage I
	State Hwy. 322, Stage II
	Stateline
	Socagee
Upper Neches River Municipal Water Authority	Fastrill Reservoir (Already Unique Site)

A brief description of each of the above reservoir sites follows. Appendix 8-A contains maps showing the proposed locations for each reservoir.

8.2.1 Lake Columbia

The reservoir is a project of Angelina and Neches River Authority (ANRA) located predominantly in Cherokee County but extends into the southern portion of Smith County. Figure 8-A.2 indicates the location for Lake Columbia. The reservoir would be formed by construction of a dam on Mud Creek approximately 2.5 miles downstream of the U. S. Highway 79 crossing. The dam is expected to impound water approximately 14 miles upstream with an estimated surface area of 10,133 acres. The reservoir is permitted for 85,507 ac-ft per year of water. It has a total storage volume at normal pool elevation, 315 feet above mean sea level (msl), of 195,500 acre-feet. State of Texas Senate Bill 1362 designated the site for Lake Columbia as a site of unique value for the construction of a dam and reservoir.

In January 2010, ANRA released a draft Environmental Impact Study for Lake Columbia. The Environmental Impact Study underwent public comment in 2010 and was submitted to the U.S. Army Corp of Engineers and other federal resource agencies for review and comment. ANRA is currently responding to comments of state and federal review agencies, including the TCEQ, TPWD, and Environmental Protection Agency.

8.2.2 Ponta Reservoir

The Ponta Reservoir would be located on Mud Creek in Cherokee County east of Jacksonville, Texas. The dam site is located approximately one mile upstream from the Southern Pacific Railroad crossing over Mud Creek. Figure 8-A.2 indicates the proposed location. The normal pool elevation would be about elevation 302 ft msl and would have an area of 11,000 acres. Storage capacity at normal pool elevation would be 200,000 acre-feet. Previous studies have indicated that the reservoir could provide a dependable yield of 105,000 ac-ft per year. However, with the construction of Lake Columbia the yield would be substantially less.

8.2.3 Rockland Reservoir

The Rockland Reservoir site is located on the Neches River at River Mile 160.4. The top of the flood pool would be at elevation 174 feet, msl with top of conservation pool of 165 feet, msl. It is estimated the reservoir site would affect 99,524 acres of wildlife habitat (Frye, 1990).

Rockland Reservoir was authorized for construction as a federal facility in 1945, along with Sam Rayburn, B. A. Steinhagen and Dam A lakes. A report in 1947 recommended construction of Sam Rayburn and B. A. Steinhagen with deferral of Rockland Reservoir and Dam A until such time the need develops. Rockland and Dam A were classified as inactive in 1954. A re-evaluation study performed in 1987 identified the potential for significant benefits in the areas of flood control, water supply, hydropower, and recreation.

8.2.4 Big Cow Reservoir

The Big Cow Reservoir is a proposed local water supply project on Big Cow Creek in Newton County. The Big Cow Creek dam site is located about one-half mile upstream from U.S. Hwy 190, west-northwest of the Town of Newton. It is in the Lower Sabine Basin. Figure 8-A.4 indicates the location of the proposed reservoir. The expected yield of the reservoir is 61,700 ac-ft per year with a storage capacity of 79,852 ac-ft and an area of 4,618 acres. The conservation level would be 212 feet msl.

The perennial streams that feed Big Cow Creek and abundant rainfall should provide sufficient inflow for considerable yield for a reservoir of this size.

8.2.5 Bon Wier Reservoir

The Bon Wier dam site is located on the state line reach of the Sabine River in Newton County, Texas and Beauregard Parish, Louisiana. The reservoir would extend from about 5 miles upstream of U.S. Hwy 190 to approximately Highway 63. Figure 8-A.4 indicates the location of the proposed reservoir. It was originally proposed for re-regulation of the hydropower discharges from Toledo Bend Reservoir and for the generation of hydropower. The reservoir, if constructed, would yield 440,000 ac-ft per year at a normal operating elevation of 90 feet above msl. The area and capacity would be 34,540 acres and 353,960 acre-feet, respectively.

It is estimated that the Bon Wier Reservoir would affect 35,000 acres of wildlife habitat (Frye, 1990). This includes several acid bogs/baygalls, which are unique and sensitive areas of the region. Several threatened and endangered species are known to occur in this area. No cultural resource survey has been conducted, but the site is expected to affect numerous archeological and historical sites in both Texas and Louisiana.

The Clean Rivers Program Water Quality data reported possible concerns for elevated total dissolved solids and low dissolved oxygen during the summer months. The site also requires congressional approval for construction of a dam, because it is on interstate navigable waters of the U.S.

8.2.6 Carthage Reservoir

The Carthage Reservoir is a proposed main stem project on the Sabine River in Panola, Harrison, Rusk and Gregg counties. It is located immediately upstream of the U.S. Highway 59 crossing and downstream of the City of Longview. Figure 8-A.1 indicates the proposed location. The yield of this reservoir, if constructed, would be approximately 537,000 ac-ft per year at a conservation pool elevation of 244 feet msl. The area and capacity would be 41,200 acres and 651,914 acre-feet, respectively.

Developmental concerns for Carthage Reservoir include bottomland hardwoods, aquatic life, lignite deposits, and cultural resources. The downstream half of the site encompasses a U.S Fish and Wildlife Service Priority 1 bottomland hardwood area. This portion of the Sabine River is designated a significant stream segment and is home to several protected aquatic species (Bauer, 1991). Other potential conflicts with this site include oil and gas wells. Permitting for this reservoir will require an act of Congress since the dam is located on navigable interstate waters of the U.S. There is one active lignite mine, South Hallisville Mine No. 1, near the reservoir boundary.

The water quality assessment of the Sabine River (Sabine River Authority of Texas, 1996) indicates this segment of the river has possible concerns for nutrients, but the water quality is improving. The advantage of this reservoir is its large yield. The estimated yield of 537,000 ac-ft per year would provide for all projected needs well beyond the year 2060.

8.2.7 Kilgore Reservoir

The Kilgore Reservoir is a proposed local water supply project located on the Upper Wilds Creek in Rusk, Gregg, and Smith counties. Figure 8-A.1 indicates the proposed location of the reservoir. It was originally proposed to supplement the City of Kilgore's water supply. The project would provide a yield of 5,500 ac-ft per year at the normal operating elevation of 398 feet msl. At that level, the area and capacity would be 817 acres and 16,270 acre-feet, respectively.

Construction of this reservoir has never been initiated, and the City of Kilgore is using diversions from the Sabine (purchased from Sabine River Authority of Texas and released from Lake Fork) and ground water for its water supply. However, this project still has the potential as a local water supply source in the Kilgore area should other proposed projects not be developed. Only preliminary studies have been performed for the Kilgore Reservoir and no environmental impacts have been assessed. Based on preliminary screening data, the site is not located within a priority bottomland hardwood area; there are no known water quality issues and no active mines within the reservoir site.

8.2.8 Rabbit Creek Reservoir

Several reservoir projects have been proposed on Rabbit Creek for local water supply. The latest proposal for the City of Overton and surrounding communities was completed in 1998 (Burton, 1998). The proposed reservoir project is located on Rabbit Creek in Smith and Rusk counties, and would have a firm yield of 3,500 ac-ft per year. Figure 8-A.1 indicates the proposed location of the reservoir. This is considerably less yield than the previous studies, which is due in part to the smaller storage capacity and conservative inflows that were assumed for the study. In the latest study, the area would be 520 acres and the capacity would be 8,000 acre-feet at a conservation level of 406 ft msl. However, this yield is considered satisfactory to meet the regional demands of the area. Environmental review of the site reports no significant concerns that would preclude development. There are also no significant cultural resources in the area, no known water quality issues, and no active mining within the reservoir area.

The advantages of this reservoir site are the few developmental concerns. However, it was rejected as a water supply alternative in the 1998 study due to costs. A large percentage of the total costs were associated with a water treatment and distribution system. Due to the relatively low yield of Rabbit Reservoir, this project could only be considered for local water supply.

8.2.9 State Highway 322 Stage I

The Highway 322 Reservoir is a proposed local water supply project in Rusk County, upstream of Lake Cherokee. Figure 8-A.1 indicates the proposed location. The project, as originally proposed, was to be developed in two stages: 1) a dam and reservoir on Tiawichi Creek (Stage I), and 2) a separate dam and reservoir on Mill Creek (Stage II). The reservoirs were to be joined by a connecting channel that would allow one spillway to serve both dams.

The proposed Stage I dam is located on Tiawichi Creek, approximately one mile upstream of its confluence with the upper end of Lake Cherokee. The reservoir, at its normal operating elevation of 330 feet msl, would provide a net yield of 22,000 ac-ft per year. Its area and capacity would be 4,450 acres and 82,450 acre-feet, respectively. If Stage I is operated independently from Lake Cherokee, the firm yield of the reservoir would be reduced due to Lake Cherokee's superior water rights.

The primary developmental concern for the Stage I reservoir is active lignite mining. In 1995, the Oak Hill Mine expanded its current permit area to include approximately one third of the proposed Stage I reservoir area. There have been no environmental studies conducted for this site. Based on preliminary screening, the site is located outside priority bottomland hardwood areas, and there are no known water quality issues.

8.2.10 State Highway 322 Stage II

The State Highway 322 - Stage II reservoir is the second phase of the State Highway 322 water supply project in Rusk County. The Stage II dam would be located on Mill Creek, approximately one mile upstream of the existing Lake Cherokee. Figure 8-A.1 indicates the proposed location. Operated at the same level as Stage I (330 feet msl), this project would provide an increased yield to the Cherokee Lake system of 13,000 ac-ft per year with added storage capacity of 112,000 acre-feet. Stage II surface area would be 2,060 acres. The State Highway 322 project (Stages I and II) and Lake Cherokee could be operated as a system to provide a total yield of 53,000 ac-ft per year and maintain the recreational and aesthetic benefits currently provided by Lake Cherokee. If State Highway 322 project were operated independently from Lake Cherokee, the firm yield would be reduced due to Lake Cherokee's superior water rights.

The primary developmental concern for Stage II is the active lignite mining. Surface mining records indicate that the Oak Hill Mine permit encompasses much of the Stage II reservoir. Preliminary screening indicates no priority bottomland hardwoods in the reservoir area, and there are no known water quality issues. The advantages to this reservoir site are its location near the areas with projected water needs and the possibility that when mining is completed, the site will already be cleared and ready for reservoir development.

8.2.11 Stateline Reservoir

The Stateline Reservoir is a proposed main stem project on the Sabine River, approximately eight miles upstream of Logansport, Louisiana and about four miles upstream from the headwaters of Toledo Bend Reservoir. Figure 8-A.1 indicates the proposed location. The project site is located in the southeastern section of Panola County and would have an estimated yield of 280,000 ac-ft per year. At the conservation level of 187 feet msl, the area and capacity would be 24,100 acres and 268,330 acre-feet, respectively.

Developmental concerns for this site include bottomland hardwoods, oil and gas wells, water quality, and permitting issues. The northern half of the site lies in a USFWS designated Priority 1 hardwood area. The

southern half is a high-quality wetland area and currently being considered for a wetland mitigation bank by the Sabine River Authority of Texas. The mineral rights associated with the Carthage Oilfield significantly affect land acquisition for the reservoir. The Clean Rivers Program Water Quality data indicated possible concerns for elevated nutrient levels, metals, low dissolved oxygen, and fecal coliform. This segment of the stream is also a known habitat for several protected aquatic species. Permitting for this reservoir will require an act of Congress since the dam is located on navigable interstate waters of the U.S. (Rivers and Harbors Act, 1899). Construction of the dam and reservoir may also require consent of Louisiana for the part that will affect the state of Louisiana (Sabine River Compact). As currently proposed, the dam site is located immediately upstream of the Stateline reach and there is minimal impact to Louisiana lands. However, due to the close proximity of Toledo Bend Reservoir, it is unlikely that Stateline Reservoir would be more economical than Toledo Bend in meeting the needs of the Upper Basin.

8.2.12 Socagee Reservoir

The Socagee Reservoir site is located in the eastern portion of Panola County on Socagee Creek, approximately six miles upstream of its mouth. Figure 8-A.1 indicates the proposed location. The reservoir, at normal pool elevation, would have a yield of 39,131 ac-ft per year. The reservoir area would be approximately 9,100 acres and the capacity would be about 160,000 acres.

Approximately 40 percent of the site overlies existing lignite deposits. As of 1986, there was no known exploitation of the lignite deposits, and there currently are no active mines within the area. One cultural resource site is reported in the reservoir boundary. There are no known water quality issues or priority bottomland hardwoods that affect this reservoir site. Socagee Reservoir could be used to meet the local needs of Panola County; however, Lake Murvaul, which has been designated for Panola County use only, has adequate yield to meet the future needs of Panola County.

8.2.13 Fastrill Reservoir

Fastrill Reservoir has long been a project of the City of Dallas and Upper Neches River Municipal Water Authority and the site was designated as unique by the Texas Legislature in 2007. Subsequently, actions at the federal level to designate a wildlife refuge within the footprint of the proposed lake have called into question the lake's ultimate viability. However, because of the site's designation by the Texas Legislature, the ETRWPG has decided not to eliminate it from the list of proposed reservoirs in the ETRWPA at this time. The reservoir would be located on the Neches River in Anderson and Cherokee Counties downstream of Lake Palestine and upstream of the Weches Dam site. The dam would be located at River Mile 288. Figure 8-A.2 indicates the proposed location. Normal pool elevation would be at an elevation of 274 ft msl and would have an area of 24,950 acres based on digital topographic information. Recent analyses using the Neches River Basin Water Availability Model (WAM) indicate that the firm yield of Fastrill Reservoir may range from approximately 140,000 ac-ft per year (stand-alone operations) to about 155,000 ac-ft per year (system operations with Lake Palestine) subject to senior water rights and Consensus Criteria for Environmental Flow Needs.

8.3 Legislative and Regulatory Recommendations

Rules in 31 Texas Administrative Code 357.43(d – f) state that regional water planning groups are to consider and make recommendations to the legislature regarding regulatory, administrative, or legislative issues that the group believes are needed and desirable to achieve the stated goals of state and regional water planning, including to:

(1) Facilitate the orderly development, management, and conservation of water resources;

(2) Prepare for and respond to drought conditions; or

(3) Facilitate more voluntary water transfers in the region.

For this update of the regional water plan, the ETRWPG discussed legislative and regulatory recommendations at three meetings, beginning with the January 28, 2015, meeting of the group. The Executive Committee of the ETRWPG also reviewed previous recommendations made pursuant to the planning process and evaluated new potential recommendations. Proposed recommendations were brought to the ETRWPG at the March 11, 2015, meeting for consideration. Following is a list of recommendations adopted by the ETRWPG on April 8, 2015.

8.3.1 Flexibility in Determining Water Plan Consistency

In previous planning cycles, the ETRWPG has expressed concerned that small cities and unincorporated areas that fall under the group of "county-other" may not have specific water needs and water management strategies identified in the regional water plan due to the nature of aggregating these entities. As such, there is concern that these entities may not be eligible for state funding assistance. The ETRWPG is also concerned that there is not sufficient flexibility in identifying and implementing water management strategies as it pertains to permitting and funding such projects. Water suppliers need to have a full range of options as they seek to provide new water supplies for Texas' future. It is impossible to foresee all the possibilities for new water supplies in a planning process such as this, and changing circumstances can change the timing, amounts, and preferred options for new supplies very quickly. The inclusion of alternate strategies in regional water planning is the first step in providing this flexibility. In addition, the ETRWPG recommends that the following steps be taken to address these concerns.

- The TWDB should add language to their guidance for funding that allows entities that fall under the planning limits to retain eligibility for state funding of water related projects without having specific needs identified in the regional water plans.

- The TWDB and the TCEQ should interpret existing legislation to give the maximum possible flexibility to water suppliers as they seek to serve the public and provide new supplies. Changes in the timing of supply development, the order in which strategies are implemented, the amount of supply from a management strategy, or the details of a project should not be interpreted as making that project inconsistent with the regional plan.

- Willing buyer/willing seller transactions of water rights and treated water should not be controlled by this regulation. Such transactions may be beneficial to all concerned and may simply not have been foreseen in the planning process.

- The TWDB and TCEQ should make use of their ability to waive consistency requirements if local water suppliers elect strategies that differ from those in the regional plan.

In this round of planning, the TWDB has allowed for the use of sub-WUG planning allowing for WUGs to be subdivided into sub-WUG level units for purposes of doing more detailed analysis and accounting to better account for and present water supplies and needs within, for example, county-other WUGs. The 2021 Plan does not include any sub-WUGs, but the RWPG will consider the creation of such at the request of an existing utility, public water system, or representative of a geographic area within an ETRWPA WUG that meets the TWDB criteria for a sub-WUG.

8.3.2 Continued Funding by the State of the Regional Water Planning Process on a Five-Year Cycle

The ETRWPG believes the grassroots planning effort created by Senate Bill 1 is important to the state of Texas and should be continued. In addition, the ETRWPG believes that the most fair and efficient method of financing continuation of this effort for future planning cycles is to continue funding of this effort by the

state with administrative expenses for the region being provided from sources within the region. There are important tasks that need to continue. Improvement of data for the next planning cycle is very important. State funding of those efforts needs to be made available.

8.3.3 Unique Reservoir Designation

The 79th Texas Legislature designated 19 sites as having unique value for the construction of a reservoir. Two of these sites, Lake Columbia and Lake Fastrill are located in the ETRWPA. Loss of this designation for Lake Columbia or Lake Fastrill could unnecessarily limit the ability of sponsors of these proposed reservoirs to develop these sites. The ETRWPG recommends that the designation of unique reservoir site for Lake Columbia and Lake Fastrill be retained through the current planning horizon, 2070.

8.3.4 Water Reuse

The ETRWPG recommends that current regulations as they pertain to the reuse of treated wastewater (i.e., water reuse) should be reviewed and amended, as necessary, to encourage the development of these resources.

8.3.5 Funding

In order to take advantage of the variety of funding options available through the TWDB, increased flexibility by the agency is needed. For example, TWDB guidance currently excludes the replacement of aging infrastructure from eligibility for funding through the existing Water Infrastructure Fund & State Water Implementation Fund for Texas. The ETRWPG recommends that the TWDB expand existing programs to assist entities with funding replacement and repairs to aging infrastructure and/or allow replacement of water supply infrastructure to be funded through the Water Implementation Fund program. This would include existing well fields, transmission lines, and storage facilities.

In addition, the TWDB does not provide for sufficient flexibility in categorical exclusions for Environmental Information Documents that are required for funding of water projects. Increasing flexibility regarding these exclusions could ease the crisis in funding available for water projects.

The TWDB offers the Economically Distressed Areas Program (EDAP) to certain areas in need of water projects. The EDAP provides grants, loans, or combination grant/loans when requirements are met:

- for water and wastewater services;
- in economically distressed areas; and
- present facilities are inadequate to meet residents' minimal needs.

However, requirements to meet the EDAP are very difficult for local governments and areas to administer, causing otherwise eligible local governmental entities to elect to not pursue the EDAP funding. EDAP requirements should be revised to reduce unnecessary and difficult requirements for eligibility, including requirements for model subdivision planning.

8.3.6 Uncommitted Surface Water

The Texas Water Code currently allows the TCEQ to cancel any water right, in whole or in part, for ten consecutive years of non-use. This rule inhibits long-term water supply planning. Water supplies are often developed for ultimate capacity to meet needs far into the future. Some entities enter into contracts for

supply that will be needed long after the first ten years. Many times, only part of the supply is used in the first ten years of operation.

The regional water plans identify water supply projects to meet water needs over a 50-year use period. In some cases, there are water supplies that are not currently fully utilized or new management strategies that are projected to be used beyond the 50-year planning period. To support adequate supply for future needs and encourage reliable water supply planning, the ETRWPG:

- Opposes unilateral cancellation of uncommitted water contracts/rights;
- Supports long term contracts that are required for future projects and drought periods; and
- Supports "interruptible" water supply contracts as a way to meet seasonal and short-term needs before long-term water rights are fully utilized.

8.3.7 Standardized Processes for Regional Water Plan Development

The process of permitting a federal water project, such as a reservoir, is a long, detailed, and resource intensive projects that must follow federal guidelines of the National Environmental Policy Act (NEPA) process. The ETRWPG recommends that the TWDB develop guidelines for regional water planning evaluations of federally permitted water projects that will produce documentation that can be integrated and used in the NEPA process. In addition, the TWDB is encouraged to continue to develop relationships with federal authorities to allow the use of the state and regional water planning population projections in the NEPA process.

8.3.8 Funding for Additional Groundwater Modeling

The ETRWPG recommends that funding for groundwater modeling for development of desired future conditions (DFCs) and modeled available groundwater (MAGs) be provided to the TWDB. This would improve the development of DFCs and MAGs by enabling a consistent, standardized approach across Groundwater Conservation District (GCD) boundaries to groundwater modeling.

8.3.9 Clarification of Unique Stream Segment Criteria

Consideration of the designation of stream segments of unique ecological value (unique stream segments) is a component of regional water planning throughout the State. For some, however, there is a significant concern about the use of unique stream segments because of a lack of clarity about how the designation might be used in the future. In particular, there are concerns about the possibility of restriction of property rights for landowners adjacent to designated unique stream segments. House Bill 1016 of the 84th Texas Legislature proposes language specific to the Region L Water Planning Area, providing clarification by stating that the designation of a river or stream segment as being of unique ecological value:

1. means only that a state agency or political subdivision of the state may not finance the actual construction of a reservoir in the designated segment;
2. does not affect the ability of a state agency or political subdivision of the state to construct, operate, maintain, or replace a weir, a water diversion, flood control, drainage, or water supply system, a low water crossing, or a recreational facility in the designated segment;
3. does not prohibit the permitting, financing, construction, operation, maintenance, or replacement of any water management strategy to meet projected water supply needs recommended in, or designated as an alternative in, the 2011 or 2021 Regional Water Plan, and

4. does not alter any existing property right of an affected landowner.

The ETRWPA supports the proposed clarifications found in House Bill 1016 and recommends that these clarifications be incorporated into the regional water planning process on a statewide basis.

8.3.10 Recommendations Regarding Water Management Strategy Prioritization

The ETRWPG has previously commented on the prioritization process that was required in 2013 by the 83rd Texas Legislature through House Bill 4.[1] The Region's comments and concerns about the prioritization process included in the 2016 Plan are included as Appendix 8-B of this 2021 Plan. Specific recommendations of the ETRWPG associated with the referenced technical memorandum include the following:

- Project Description: Care should be taken in development of the DB22 to provide more clarity, resolve problems, and minimize risk of inappropriate scoring. In addition, a commentary section should be added to the scoring template to enable additional detail to be added by the RWPG as necessary.

- Scoring to Minimize Ties: Water planning regions should be allowed to add their own unique scoring criteria to be used specifically for the purpose of breaking scoring ties.

- Uniform Standard 2A: Uniform Standard 2A should be modified to provide for a maximum score for new surface water sources if modeling suggests a sufficient quantity of water would be available.

- Uniform Standard 3C: This standard should be modified to eliminate the advantage in scoring given to project sponsors with only one recommended WMS.

- Uniform Stand 3D: A more detailed scoring breakdown is needed to distinguish between two WUGs served and numbers of WUGs greater than two.

- Projects Shared across Regions: Clarification is needed on how projects serving more than one region will be integrated into one list.

- Evaluation across Water Type and Water Use Categories: The prioritization process should be modified to minimize the comparison of raw water and treated water strategies or water use categories.

- Rolled up Projects: The TWDB should clarify the definition of what constitutes a rolled-up project.

In addition, the ETRWPG recommends that, for purposes of prioritization of water management strategies identified in a regional water plan, the definition of a "project" be clarified to exclude strategies that do not have a capital cost associated with them. This will significantly reduce the effort required to prioritize identified projects by eliminating the requirement to prioritize strategies that will not need to seek funding anyway.

[1] The ETRWPG provided the results of the prioritization of water management strategies identified in the 2011 Plan in a letter dated August 29, 2014, to the TWDB. The letter included a number of exhibits including a technical memorandum dated August 29, 2014, entitled Regional Water Planning Group Comments and Concerns.

These recommendations are subject to change after the prioritization of projects included in the 2021 Plan.

8.3.11 Allow Groundwater Supplies to Exceed the Modeled Available Groundwater

TWDB policy regarding the use of MAGs in regional water planning currently states that the MAG values are a cap for water supply and strategy development. However, the MAG is not necessarily considered a cap for permitting purposes by GCDs according to Chapter 36 of the Water Code. In addition, MAGs are unenforceable in areas with no groundwater regulation (i.e., with no GCDs). Chapter 36 describes the process of managing to DFCs. The MAG is an estimate of the groundwater availability based on the DFC, but Chapter 36 provides flexibility for GCDs to permit above or below the MAG based on local knowledge, usage patterns, and other factors. The ETRWPG recommends that the TWDB allow groundwater supplies to exceed the MAG in the regional water plan if the Regional Water Planning Group obtains written agreement from the relevant GCD. This approach assumes that the strategy is consistent with the management plan of the GCD, but allows for minor shortages to be covered without excessive administrative actions, such as alternate strategies that would ultimately require a plan amendment. It also allows a GCD to apply local knowledge to account for variations in permitting approaches and usage patterns, while honoring the DFCs associated with the aquifer. This approach could also be used in areas with no GCDs if the Regional Water Planning Group demonstrates compliance with the DFCs.