

## **Section 6**

### **Additional Recommendations**

Each of the 16 regional water planning groups may make recommendations to the TWDB regarding legislative and regional policy recommendations; identification of sites uniquely suited for reservoirs; and, identification of unique ecological stream segments.

#### **6.1 Legislative and Regional Policy Recommendations**

The following regulatory, administrative, and legislative recommendations are made by the Brazos G Regional Water Planning Group to the Texas Water Development Board and to the Texas Legislature:

- Leave the planning process and the RWPGs in place for the next 5-year planning cycle;
- Recommend that the State pay all administrative costs in connection with the preparation of the regional water plan;
- Oppose the cancellation of existing water rights as a water management option;
- Support coordinated management of groundwater based on resource (i.e., aquifer) boundaries;
- Request that the Legislature give better definitions of “unique stream segment” and “unique reservoir site” and the ramifications of such designations;
- Recommend that the State devise a method (grant and loan) to pay for implementation of projects contained in approved regional plans;
- Expand existing loan/grant programs to assist agricultural interests in conserving and developing water, focusing on intensive brush controls in strategic groundwater areas;
- Delete the requirement in the rules for publication of notices in a “newspaper of general circulation” in each county in the Regional Water Planning Area for required public hearings;
- Recommend that “safe yield” as opposed to “firm yield” be used in the development of available water supply estimates for reservoirs, as appropriate;
- Encourage wastewater reuse as a water management option;
- Develop voluntary redistribution guidelines to encourage voluntary redistribution;
- Encourage regulatory agencies to assist local entities in implementing sound water quality enhancement projects to correct previously identified water quality problems in a timely manner; and
- Create incentives for industries to donate or deed water treatment and distribution facilities to governmental water suppliers.

## **6.2 Identification of Sites Uniquely Suited for Reservoirs**

TWDB rules stipulate that reservoir sites within a planning region may be recommended by the RWPG for designation by the Texas Legislature as a segment of unique ecological value, provided specified criteria are met. Possible reservoir sites located in the Brazos G region were evaluated and reported to the RWPG (Refer to Section 5A.14, Volume 2). The sites evaluated were:

- Breckenridge Reservoir - Reynolds Bend Site
- South Bend Reservoir
- Paluxy Reservoir
- Lake Bosque
- Millican Reservoir – Panther Creek Site
- Millican Reservoir – Bundic Site
- Little River Reservoir

The evaluation indicated these reservoir are potential projects to meet the water supply needs of the region and of the Brazos River Basin. After careful consideration, the Brazos G RWPG passed a resolution to not recommend any sites as unique reservoir sites, stating there is not enough information currently available to determine the effects of such a designation. Until more specific guidance is provided, any action concerning recommendations of unique reservoir sites is deferred to the next planning cycle.

## **6.3 Identification of River and Stream Segments Meeting Criteria for Unique Ecological Value**

Streams and rivers located within the Brazos G Regional Water Planning Area were evaluated to identify segments which meet criteria for unique ecological value according to the regional water planning guidelines (31 Texas Administrative Code, Section 357.8). This evaluation was described and documented in a draft report prepared for the Brazos G Regional Water Planning Group.<sup>1</sup> After careful consideration, the Brazos G RWPG passed a resolution to not recommend any rivers and streams as unique segments, stating there is not enough information currently available to determine the effects of such a designation.

<sup>1</sup> Hicks & Company, "River and Stream Segments of Unique Ecological Value in the Brazos G Regional Water Planning Area," Final Report Hicks & Company, August 2000.

### **Stream Segment Evaluation**

The evaluation utilized existing water resource planning information and guidance provided by the Texas Parks and Wildlife Department, the U.S. Army Corps of Engineers, and Brazos River Authority to identify candidate stream segments. This information was supplemented with additional analyses that included evaluation of additional candidate stream segments (not identified by existing studies), utilization of historical and recently acquired satellite (Landsat) imagery, and field evaluations that included measurement of specific components of wildlife habitat. Segments were identified which met one or more of the following criteria specified by the planning guidelines:

- I. Biological Function: A stream segment with significant overall habitat value defined by the following attributes:
  - A. Quantity (acreage or areal extent of habitat)
  - B. Quality
    1. Biodiversity (species richness of river, stream or riparian corridor).
    2. Age ( age of stand of trees or a specific tree that is significantly old).
    3. Uniqueness (including but not limited to the following attributes).
      - a. Undisturbed environment.
      - b. Unusual or rare habitats.
      - c. Rare species composition.
- II. Hydrologic Function: A stream segment which is fringed by habitats that perform valuable hydrologic functions.
  - A. Water quality.
  - B. Flood attenuation and flow stabilization.
  - C. Groundwater recharge and discharge.
- III. Occurrence of Riparian Conservation Areas: Stream segments which 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.
- IV. Occurrence of High Water Quality, Exceptional Aquatic Life, or 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.
- V. Occurrence of threatened or endangered species, and/or unique communities: Sites along streams where water development projects would have significant detrimental effects on state or federally listed threatened or endangered species, and sites along streams which are significant due to the presence of unique, exemplary, or unusually

extensive natural communities, such as old growth Beech-Magnolia stands and other rare natural communities.

Nineteen stream segments were identified which meet criteria for at least one or more categories of ecological significance as listed in the regional water planning guidelines (Table 6-1). Ten segments met the criteria for biological function, four qualified for hydrologic function, five met criteria for riparian conservation areas, nine qualified for designation as high water quality/exceptional aquatic life/high aesthetic value and four qualified according to the occurrence of threatened/endangered species or unique communities. Ten of the candidate sites qualified in more than one category, while three sites met criteria in at least three different categories. No single river or stream segment met all five criteria. The draft report contains additional descriptive information for these 19 sites, including photographs and location maps.



**Table 6-1.  
Summary of Significant Stream Segments**

<b>Stream Segment</b>	<b>Counties</b>	<b>Biological Function (Rank)</b>	<b>Hydrologic Function</b>	<b>Riparian Cons. Area</b>	<b>High Water Quality/Aesthetic Value</b>	<b>Threatened and Endangered Species</b>
Brazos River* <sup>1</sup>	Bosque/Johnson/Somervell/Hood	High diversity, old trees, increasing scarcity (9)			Aquatic Life/Aesthetics	
Brazos River* <sup>1</sup>	Palo Pinto	Moderate diversity, mature trees, increasing scarcity (10)			Aquatic Life/Aesthetics	Texas fawnsfoot (Rare, not listed)
Clear Fork Brazos River	Stephens	High diversity, old trees (3)				
Colony Creek*	Eastland	High diversity, old trees, unique, wetlands (7)			Ecoregion Stream, dissolved oxygen; benthic macroinvertebrates	
Colorado River*	Lampasas	White bass spawning area (8)			Aquatic Life/Aesthetics: Exceptional aesthetic beauty and value	Concho water snake (Fed. Threatened)
Cow Bayou*	Falls/McLennan				Ecoregion Stream, dissolved oxygen; benthic macroinvertebrates	
East & Middle Yegua Creek	Lee/Burleson		Flood attenuation, water quality, wetlands	Somerville WMA		
Lake Creek*	Grimes		Flood attenuation, aquifer recharge		Ecoregion Stream, dissolved oxygen; benthic macroinvertebrates	
Lampasas R.	Lampasas/Hamilton	High diversity, old trees (4)				
Leon River	Coryell/Bell	Moderate diversity, mature to old trees, size (2)		Mother Neff State Park & USACE lands		
Little River*	Milam/Bell					Rare freshwater mussels, thriving population
Navasota River	Brazos/Grimes/Madison	High diversity, old trees, wetlands, size, increasing scarcity (1)	Flood attenuation, water quality, wetlands, aquifer recharge			
Navasota River	Robertson/Leon					Bald eagle (Fed. Threatened)
Neils Creek*	Bosque				Ecoregion Stream, dissolved oxygen; benthic macroinvertebrates	
North Bosque River	McLennan	High diversity, mature trees, size, increasing scarcity (5)	Flood attenuation, water quality, wetlands	Lake Waco, USACE lands/ WMA		
Nolan River	Johnson/Hill	High diversity, old trees, size, increasing scarcity (6)				
Paluxy River*	Somervell/Hood/Erath			Dinosaur Valley State Park, a National Natural Landmark		
Steele Creek*	Bosque				Aquatic Life: Ecoregion Stream, dissolved oxygen; fish	
Willis Creek*	Williamson			Granger WMA	Ecoregion Stream; benthic macroinvertebrates	

\* Designated by TPWD as Ecologically Significant.

<sup>1</sup> #1 Scenic/recreational river in northern half of Texas.

Source: TPWD unpublished data and web page: [www.tpwd.state.tx.us/conserv/sb1/rivers/unique/region](http://www.tpwd.state.tx.us/conserv/sb1/rivers/unique/region)