

**Region C Water Planning Group  
Ecologically Unique Stream and River Segments**

PROJECT: 0312-041-01  
DATE: June 1, 2009  
PREPARED FOR: Region C Water Planning Group  
PREPARED BY: Alan Plummer Associates, Inc.

---

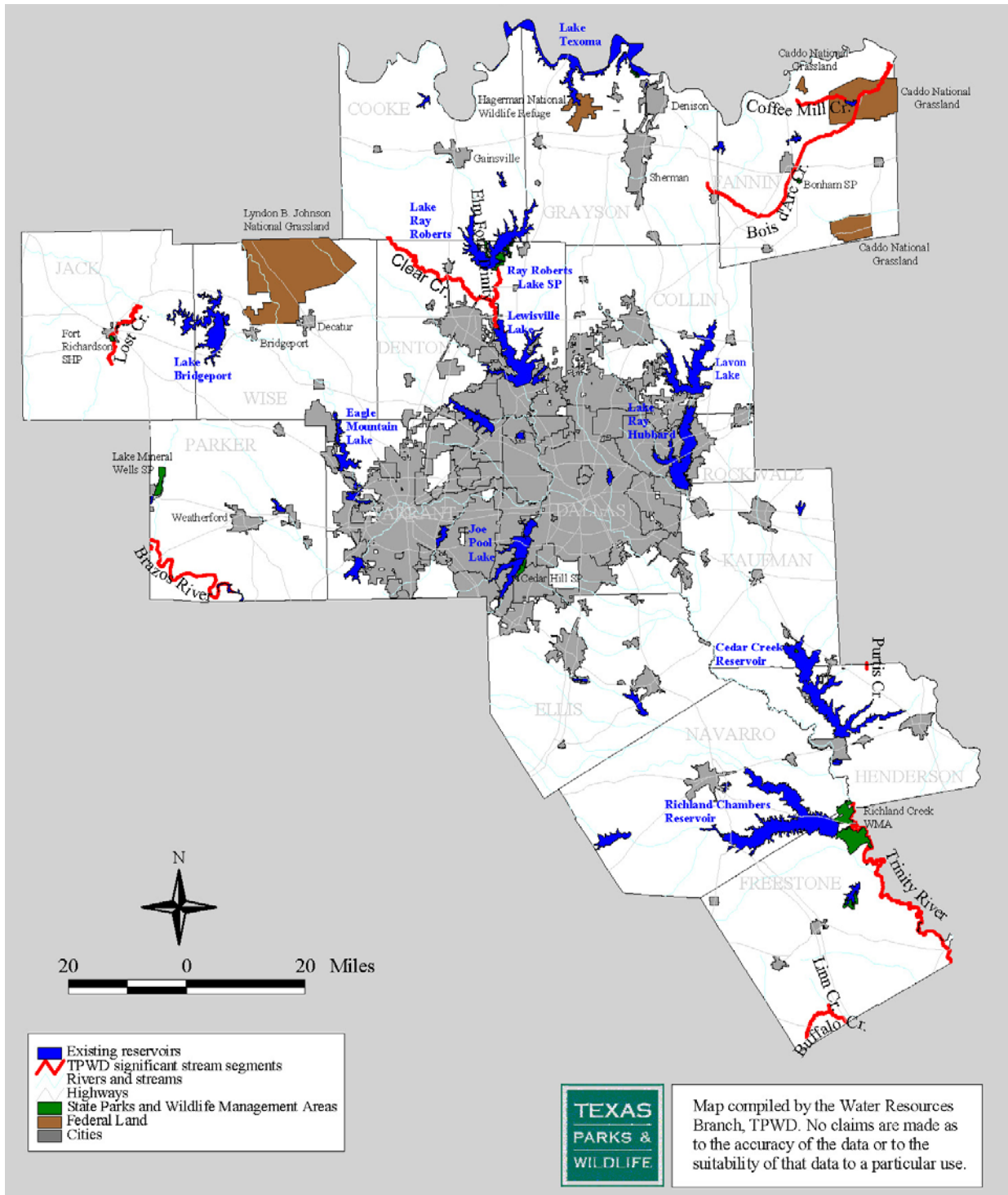
Regional water plans may include “recommendations for all or parts of river and stream segments of unique ecological value located within the regional water planning area” (Texas Administrative Code Title 31, Rule §357.8(a)). Based on identification in the regional water plans or other recommendations, the Legislature may designate a river or stream segment as having unique ecological value (Texas Water Code 16.051(f)). To date, the Region C Water Planning Group (RCWPG) has not identified any unique river or stream segment in the Region C Water Plan. This memorandum presents background information related to unique stream segments in Region C.

The Texas Parks and Wildlife Department (TPWD) developed *Ecologically Significant River and Stream Segments for Region C, April 2002*, which recommended ten stream segments for the RCWPG to consider for identification in the Region C Water Plan. The TPWD considered the following attributes with respect to ecological value (Texas Administrative Code Title 31, Rule §357.8(b)): biological function, hydrologic function, riparian conservation areas, high water quality/exceptional aquatic life/high aesthetic value, and threatened or endangered species/unique communities. Table 1 lists these ten segments and the attributes that TPWD identified that may qualify them for unique stream segment status. Figure 1 shows the location of these segments within Region C. The TPWD has not modified this list since it was originally published in 2002.

During the 2006 regional planning cycle, the RCWPG appointed a subcommittee to consider the issue of unique stream segments. The subcommittee developed a list of seven stream segments for consideration. Five of these segments were included as part of the TPWD list, and two additional segments were also proposed by the subcommittee. Of the seven segments, two were dependent on the recommendation of the adjoining region and were ultimately removed from consideration for this reason. The subcommittee recommended the remaining five segments to the RCWPG for consideration as ecologically unique:

- Coffee Mill Creek
- Lost Creek
- Clear Creek
- Hickory Creek
- Fish Creek

**Figure 1. Ecologically Significant River and Stream Segments for Region C – April 2002<sup>1</sup>**



<sup>1</sup> [http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/water\\_quality/sigsegs/media/region\\_c\\_map.pdf](http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/water_quality/sigsegs/media/region_c_map.pdf)

**Table 1. Ecologically Significant River and Stream Segments for Region C – April 2002<sup>2</sup>**

<b>Stream</b>	<b>Segment</b>	<b>Biological Function</b>	<b>Hydrologic Function</b>	<b>Riparian Conservation Area</b>	<b>High water quality/exceptional aquatic life/high aesthetic value</b>	<b>Threatened or endangered species/unique communities</b>
Bois d'Arc Creek	From the confluence with Red River (Fannin) to headwaters (Grayson).	X	X	X		
Brazos River	From 330 feet upstream of FM 2580 (Parker County) upstream to Parker/Palo Pinto County Line (Segment 1206).	X			X	X
Buffalo Creek	From the confluence with Alligator Creek (Freestone) upstream to State Route 164 (Freestone).	X	X			
Clear Creek	From the confluence with the Elm Fork of the Trinity River (Denton) upstream to the Denton/Cooke County line.				X	
Coffee Mill Creek	From the confluence with Bois d'Arc Creek (Fannin) upstream to its headwaters (Fannin).			X		
Elm Fork of Trinity River	From headwaters of Lewisville Lake (Denton) upstream to Lake Ray Roberts Dam (Denton) (Segment 839).			X		
Linn Creek	From the confluence with Buffalo Creek in Freestone County upstream to County Road 291 (Freestone).	X	X			
Lost Creek	From the confluence with the West Fork of the Trinity River northeast of Jacksboro (Jack) to the headwater located about four miles southwest of Jacksboro (Jack).			X	X	
Purtis Creek	From confluence with South Twin Creek (Henderson) upstream to Henderson/Van Zandt County Line.			X		
Trinity River	From Freestone/Anderson/Leon County line upstream to Anderson/Henderson County line (Segment 804).	X		X		X

<sup>2</sup> [http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/water\\_quality/sigsegs/regionc.phtml](http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/water_quality/sigsegs/regionc.phtml)

The RCWPG opted not to identify any stream segments of unique ecological value in the Region C Water Plan, because the implications of this action are uncertain. Texas Water Code 16.051(f) states that Legislature designation of a river or stream segment of unique ecological value “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 segment designated by the legislature under this subsection.” However, regional water planning groups must assess the impact of each water management strategy on unique stream segments (Texas Administrative Code Title 31, Rule §357.8(c)), including:

- “quantitative analysis of the “impact of the plan on the flows important to the river or stream segment, as determined by the regional water planning group, comparing current conditions to conditions with implementation of all recommended water management strategies,” and
- description of “the impact of the plan on the unique features cited in the region's recommendation of that segment.”

While the Texas Administrative Code does not explicitly prevent the adoption of a water management strategy that impacts a designated stream, it is unclear whether the Code implies some level of protection beyond the prevention of state-funded reservoir development. Such implied protection could impact use of private property, water rights, water quality permits, and other issues (such as treated wastewater discharge upstream, upstream water reuse, upstream development, instream flow issues, etc.). In addition, it is uncertain whether the Code will be amended in the future to explicitly include additional protection for designated unique stream segments.

In the 2001 and 2006 Region C Water Plans, the RCWPG listed questions that the group felt were important to be answered before making any recommendations for unique stream segment designations. Of the original questions, the following still appear to have uncertain answers:

- How would adjacent private properties be affected by the designation?
- How would future water rights be affected? For example, would additional instream flow requirements be imposed on future water rights upstream due to the designation?
- How would designation affect regulatory programs to protect water quality?
- What area would be affected by the designation? The stream? The entire watershed? An area surrounding the stream?
- Could the designation be reversed?

State and federal agencies comments received in response to the Chapter 8, Section 8.2, Recommendations for Ecologically Unique River and Stream Segments of the draft 2006 Region C Water Plan are as follows:

## **Larry McKinney, Texas Parks and Wildlife:**

It is disappointing that the plan does not recommend nomination of any stream segments as ecologically unique due to concerns regarding unintended consequences of designating a segment as ecologically unique. The primary concern voiced related to impacts to private property rights of landowners adjacent to a designated stream segment. The Region C plan does recommend unique sites for reservoir construction. A unique reservoir site would appear to have greater impacts associated with private landowner rights than an ecologically unique stream segment. Recommending stream segments as ecologically unique gives the regional water planning groups an opportunity to emphasize their commitment to planning for environmental water needs.

**Does the plan recommend any ecologically unique stream segments?** Region C established a committee to review and recommend river and stream segments as ecologically unique. The committee recommended five stream segments for the planning group to consider. The planning group decided to not take action on any of the stream segments due to unanswered questions regarding unintended consequences of designating a segment as ecologically unique. The primary concern was impacts to private landowner right adjacent to a designated stream segment. The regional water planning groups have the task of recommending ecologically unique stream segments while the Legislature has the authority to designate a segment. The committee was able to decide on five streams that met the criteria of an Ecologically Unique Stream segment. Region C has the option of recommending the segments and using it as an opportunity for the Legislature to address the unanswered questions regarding the unintended consequences of designating a segment. It is interesting that 6 unique sites for reservoir construction are recommended without any of the same concerns regarding private landowner rights. A unique reservoir site would appear to have greater impacts associated with private landowner rights than an ecologically unique stream segment. Recommending stream segments as ecologically unique gives the regional water planning groups an opportunity to emphasize their commitment to planning for environmental water needs.

## **Region C Response:**

There remains some uncertainty regarding the designation of unique stream segments. As discussed in Section 8.2, the Texas Legislature clarified that designating a stream segment as unique would prevent reservoir development by a political subdivision of the state. However, the Texas Water Development Board regulations require additional analysis of impacts of water management strategies on recommended stream segments, which implies some level of protection beyond the prevention of reservoir development. Private property rights are only one of the RCWPG's concerns for designation.

The impacts of recommending a unique reservoir site are clearer than the impacts of a unique stream segment designation. Designating a unique reservoir site only prohibits state agencies and political subdivisions from acquiring easements that would prohibit reservoir development.

The RCWPG's concerns about designation of ecologically significant segments may have been shared by other planning groups throughout the State. Of the sixteen regional planning groups,

only Regions E and H recommended segments for designation in the 2007 State Water Plan. The 2007 Plan included 15 recommended unique stream segments in these two regions, many of which are located within federal lands or state parks and wildlife management areas.

Recent polling of regional water planning group chairs revealed that the Region L Water Planning Group is planning to propose four segments for designation within its boundaries. At this time, it is not clear if any other regions will recommend segments for designation during the 2011 planning cycle. The concerns expressed in the 2006 Region C Plan remain largely unanswered. A RCWPG subcommittee could further evaluate suitable segments in Region C as well as the possible impacts of designation on recommended water strategies.