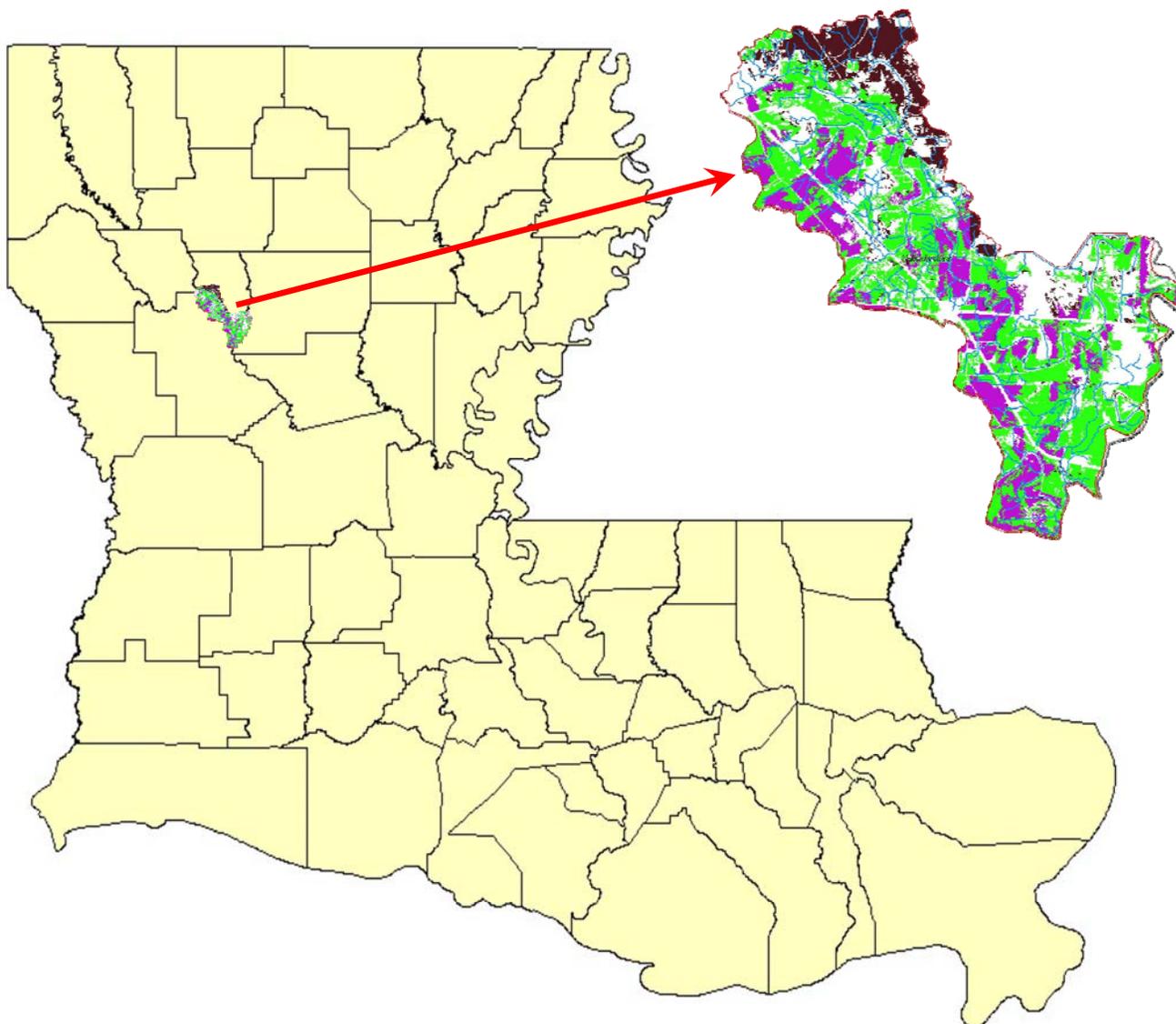




Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

CANE BAYOU WATERSHED
RAPID WATERSHED ASSESSMENT
HUC: 11140208040
LOUISIANA

Rapid Watershed Assessment Cane Bayou



Rapid watershed assessments provide initial estimates of where conservation investments would best address the concerns of landowners, conservation districts, and other community organizations. These assessments help landowners and local leaders set priorities and determine the best actions to achieve their goals.

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Cane Bayou Watershed – HUC - 11140208040

Purpose

This rapid watershed assessment (RWA) organizes resource information into one document that local conservationist, units of government, and others can use to identify existing resource conditions and conservation opportunities. This will enable the user to direct technical and financial resources to the local needs in the watershed. This RWA provides a brief description of the Upper Saline Bayou Watershed's natural resources, resource concerns, conservation needs, and ability to resolve natural resource issues and concerns.

Introduction

The Cane Bayou 11 Digit Hydrologic Unit (HUC) sub basin is comprised of 26, 00 acres. The majority of the project area consists of rural agricultural lands.

Physical Description

The area is in the West Gulf Coastal Plain section of the Coastal Plain Province of the Atlantic Plain. This Major Land Resource Area (MLRA) is on the alluvial plain along the Red River in Louisiana. The landforms in the area are level or depressional to very gently undulating alluvial plains, backswamps, oxbows, natural levees, and terraces. Elevations range from 40 to 270 feet.

Soils

For the purpose of this assessment the soils will be categorized by series. The Series consist of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition and arrangement in a soil profile. The common soil series found in this watershed are Moreland, Latanier, Roxanna, Caspiana, Severn, and Gallion.

Biology

This area once consisted entirely of bottom-land hardwood deciduous forest and mixed hardwood and cypress swamps. The major tree species in the native plant communities in the areas of bottom-land hardwoods formerly were and currently are water oak, Nutall oak, cherrybark oak, native pecan, red maple, sweetgum, eastern cottonwood, and hickory. The major tree species in the native plant communities in the swamps formerly were and currently are cypress, water tupelo, water oak, green ask, red maple, and black willow. The important native understory species are palmetto, greenbrier, wild grape, and poison ivy in the areas of bottom-land hardwoods and buttonbush, lizardtail, waterlily, water hyacinth, sedges, and rushes in the swamps.

Some of the major wildlife species in this area are white-tailed deer, feral hogs, red fox, coyote, rabbit, gray squirrel, American alligator, water turtles, water snakes, frogs, otters, beavers, armadillo, crawfish, wild turkey, mourning doves, ducks, and geese. Fishing is mainly in oxbow lakes, rivers, and bayous. The species of fish in the area include largemouth bass, smallmouth bass, catfish, drum, bluegill, gar, and yellow perch.

Climate

The average annual precipitation in the watershed ranges from 47 to 62 inches. Most of the rainfall occurs as frontal storms during late fall, winter, and early spring, although an appreciable amount of precipitation also occurs as convective thunderstorms during the early part of the growing season. The average annual temperature ranges from 63 to 67 degrees. The freeze-free period averages 280 days.

Land Use

The dominate land cover and land use in the watershed include cropland with cotton, corn, soybeans, pasture and hayland, forestland and forested wetlands. For natural vegetation the area include oaks (willow, overcup, water, cherrybark, Nutall, swamp chestnut), sweetgum, blackgum, American elm, red maple, green ash, honey locust, water locust, bald cypress, and water tupelo.

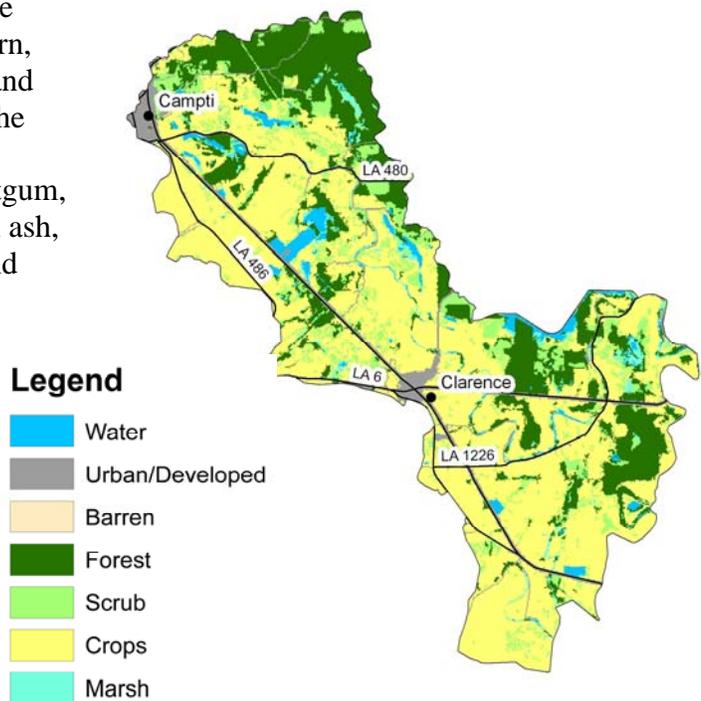


Figure 1: Land Use Map

Ecoregions

Ecoregions are regions with similar ecological characteristics. Ecoregions are delineated based on characteristics such as climate, land surface form, soil, vegetation, land use and hydrographic modifications (levee systems) to form management units with similar biological, chemical and physical features (Omernik 1987). This watershed is separated into two general physiographic areas – the Pleistocene Fluvial Terraces and the Red River Botomlands. The Red River Botomlands are broad, level floodplain and low terraces with oxbow lakes, meander scars, backswamps, natural and artificial levees and drainage ditches. The Pleistocene Fluvial Terraces are characterized as relatively flat to undulating terraces with increasing dissection and relief with age.

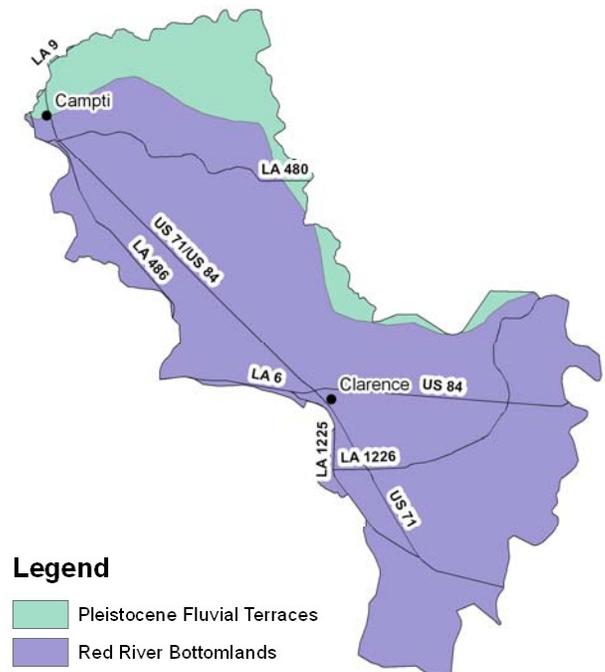


Figure 2: Ecoregions

Aquifers

The Cane Bayou Watershed is predominately underlain by the Alluvial Aquifer of the Red River Valley. The alluvium consists of fining upward sequences of gravel, sand, silt, and clay. The sand is fine-to medium-grained near the top, grading to coarse sand and gravel in the lower portions. The primary use for this aquifer is agriculture. Treatment may be necessary for some applications. Salt water is present in some areas. Water levels fluctuate seasonally with changes in river stage and precipitation. The Town of Clarence withdraws .09 million gallons per day.

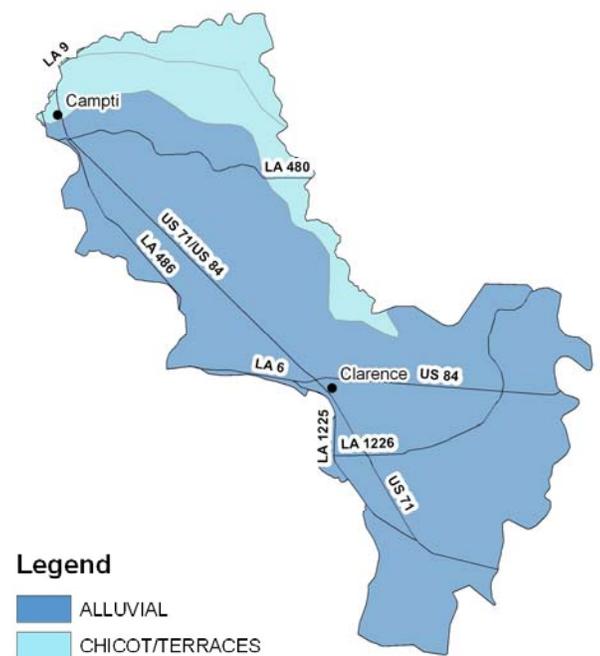


Figure 3: Aquifers

Black Lake Bayou Reservoir

Black Lake is a reservoir that sets between Creston, Louisiana and Campti, Louisiana. Water feeds into black Lake from Black Lake Bayou – which is a watershed that extends from North of Gibsland, Louisiana and south to Clarence, Louisiana. The reservoir was constructed in 1934 and now has boat launches and camp grounds for fishing and recreation.



Figure 4: Black Lake Bayou Reservoir

Gas and Oil Wells

Louisiana ranks fourth in the nation in crude oil production behind Texas, Alaska, and California (excluding Federal offshore areas, which produce more than any single state). Louisiana ranks second in the nation in natural gas production. Driven by the industrial and electricity generation sectors, Louisiana's natural gas consumption is high, ranking third among all states. Nearly one-half of Louisiana households use natural gas as their primary energy source for home heating. In Natchitoches Parish, which this watershed is located, there are 1,129 oil and gas wells producing over 22,839 barrels of oil and 531,522 million cubic feet of gas during the January 2007 – December 2007 time period.

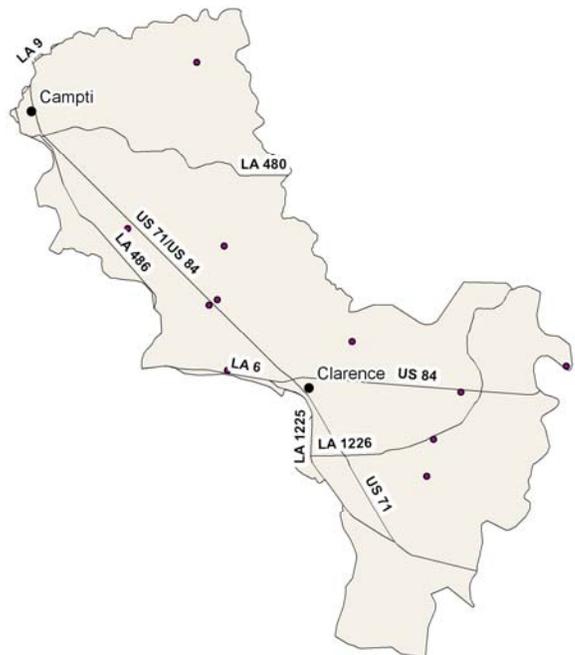


Figure 5: Gas and Oil Wells

Gas Pipelines

The pipeline industry is a vital part of the oil and gas industry in Louisiana. Louisiana has an extensive pipeline network. Pipelines transport crude oil and natural gas from the wellhead to the processing plants and refineries. Pipelines transport natural gas from producing states such as Louisiana to utility companies, chemical companies and other users throughout the nation. Pipelines are also used to transport chemical products. There is an estimated 25,000 miles of pipe moving natural gas through interstate pipelines. There are 7,600 miles of pipe that carry natural gas through intrastate pipelines to users within the state’s Boundaries while another 3,450 miles of pipelines in Louisiana transport crude oil and crude oil products. The pipeline industry employs 4,855 persons in Louisiana with an annual payroll of more than \$250 million.

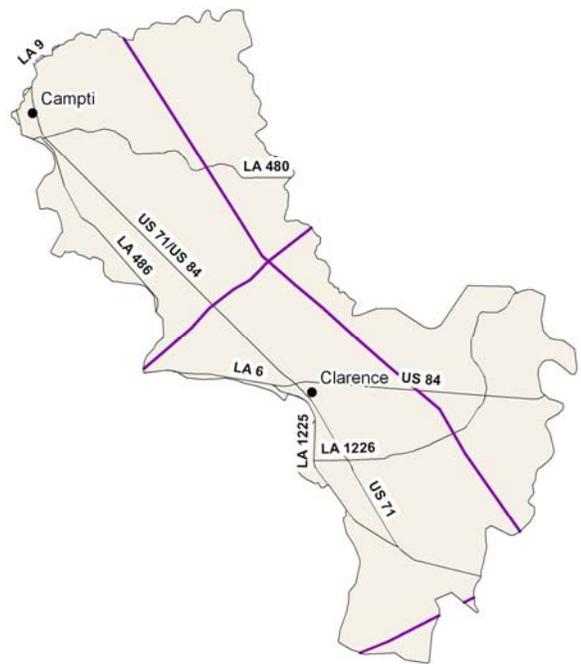


Figure 6: Gas Pipelines

Threatened and Endangered Species Status

The Endangered Species Act provides protection to animals that are experiencing a decline in population, or nearing extinction. The table below lists the species of concern and their designation.

Table 1: Threatened and Endangered Species

<u>Watershed</u>	<u>Threatened and Endangered Species</u>	<u>Status</u>	<u>Habitat</u>
Cane Bayou	Interior Least Tern (<i>Sterna antillarum</i>)	Endangered	No
Watershed	Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	No

The interior least tern (*Sterna antillarum*) is an endangered migratory shorebird that breeds, nests, and rears its young on non-vegetated portions of sandbars and islands in the Mississippi, Missouri, Arkansas, Ohio, and Rio Grande river systems and rivers of central Texas. On the lower Mississippi River, the listed interior least tern population is concentrated within approximately 500 river miles between its confluence with the Ohio River at Cairo, Illinois, and Vicksburg, Mississippi. In Louisiana, the interior least tern historically occurred along the Mississippi River north of Baton Rouge. Few birds have been observed in Louisiana along the Mississippi River in surveys conducted over the last few years. Several nesting colonies have recently been found along the Red River in northwestern Louisiana. Major threats to this species include habitat loss and human disturbance at nesting colonies. Least terns are apparently extending their breeding habitat further south along the Red River, and the absence of nesting

should be confirmed before initiating any work in or adjacent to the river during the breeding season (May 15 to August 31).

In order to minimize impacts to nesting terns, USFWS recommends that no activity should be conducted within 650 feet of a nesting colony. If least terns should be observed in proximity to the project area during the breeding season, all work should cease and USFWS should be contacted immediately for further consultation.

The project-area forested wetlands may provide nesting habitat for the bald eagle (*Haliaeetus leucocephalus*), which has officially been removed from the List of Endangered and Threatened Species as of August 8, 2007. Bald eagles nest in Louisiana from October through mid-May. Eagles typically nest in mature trees (e.g., bald cypress, sycamore, willow, etc.) near fresh to intermediate marshes or open water in the southeastern Parishes. Eagles winter, and infrequently nest immature pine trees near large lakes in central and northern Louisiana. Major threats to this species include habitat alteration, human disturbance, and environmental contaminants (i.e., organochlorine pesticides and lead).

Breeding bald eagles occupy “territories” that they will typically defend against intrusion by other eagles, and that they likely return to each year. In forested areas, bald eagles often select the tallest trees with limbs strong enough to support a nest that may weigh more than 1,000 pounds. Most nests are located in the upper 30 feet of the tree; the cone-shaped nest may be 6 to 8 feet in diameter from top to bottom.

Resource Concerns

Resource concerns are issues related to the natural environment. Natural resources include soil, water, air, plants, animals, and humans. A public meeting was held in the watershed to obtain input on the resource concerns from the general public. Some of those resource concerns are found below. The remainder of the concerns can be found in Appendix A.

Water

- Water levels Going Down in Streams – Residents that live in the Cooley Creek area are concerned about the fact that the creek goes dry. Water levels are on the decline because of Ag or industrial uses. Residents would like to see Cooley Creek restored to its original condition.
- Surface Water – There is a need to look at surface water sources for public and private usage if it is safe and available.

Animals

- Hunting, Fishing – There is a need to maintain and improve wildlife habitat for recreational purposes. Meeting participant feels that there are no incentives for maintaining/improving habitats.
- Cattle overgrazing was a concern for a meeting resident

Plants

- Aquatic weed control in the water bodies is needed
- More conservation dollars needs to be targeted for forestry practices

Humans

- Recreation – There is a need for improved recreation. Additionally waste from private camps is a problem
- Utilization of Wastewater Treatment - The septic systems on many of the camps have inadequate sewer facilities. Additionally some of the wastewater treatment from some of the smaller municipalities needs to be looked at as well.

Estimated Soil Loss

Soil loss through wind and water erosion is critical to consider for dealing with air and water quality issues. As airborne particulate, soil particles are a major contributor to air quality concerns. Soil loss through water erosion causes water quality impairments, as pollutants are attached to soil colloids and are transported into the stream systems. Erosion by water has been identified as a concern in this watershed.

- Controlling erosion not only sustains the long-term productivity of the land, but it also affects the amount of soil, pesticides, fertilizer, and other substances that move into the nation's waters.
- Through NRCS programs, many farmers and ranchers have applied conservation practices to reduce the effects of erosion by water.

Water Quality Conditions

The Louisiana Department of Environmental Quality (LDEQ) is responsible for monitoring water quality conditions in the state of Louisiana. LDEQ data shows that about 77 percent of the water bodies in the state fail to meet at least one, and sometimes more, of their intended uses. As of 2004, 318 water body sub-segments did not meet the state's "fishable" use and 111 subsegments did not meet the state's "swimmable" use. The subsegment for Cane Bayou is listed as 100803.

Designated Uses

According to LDEQ, the designated uses for streams and rivers in this watershed include: Primary Contact Recreation (PCR) – Swimming, Secondary Contact Recreation (SCR), Fish and Wildlife Propagation (FWP) – Fishing, Drinking Water Supply (DWS), Outstanding Natural Resource (ONR), Oyster Propagation (OYS), Agricultural Use (AGR), and Limited Aquatic and Wildlife (LAL). Table 1 lists the stream subsegments within the watershed including all the ambient parameters such as organics, pesticides, metals, etc for all WQN sites for the past five years. F = Fully supporting their designated use N = Not supporting their designated use

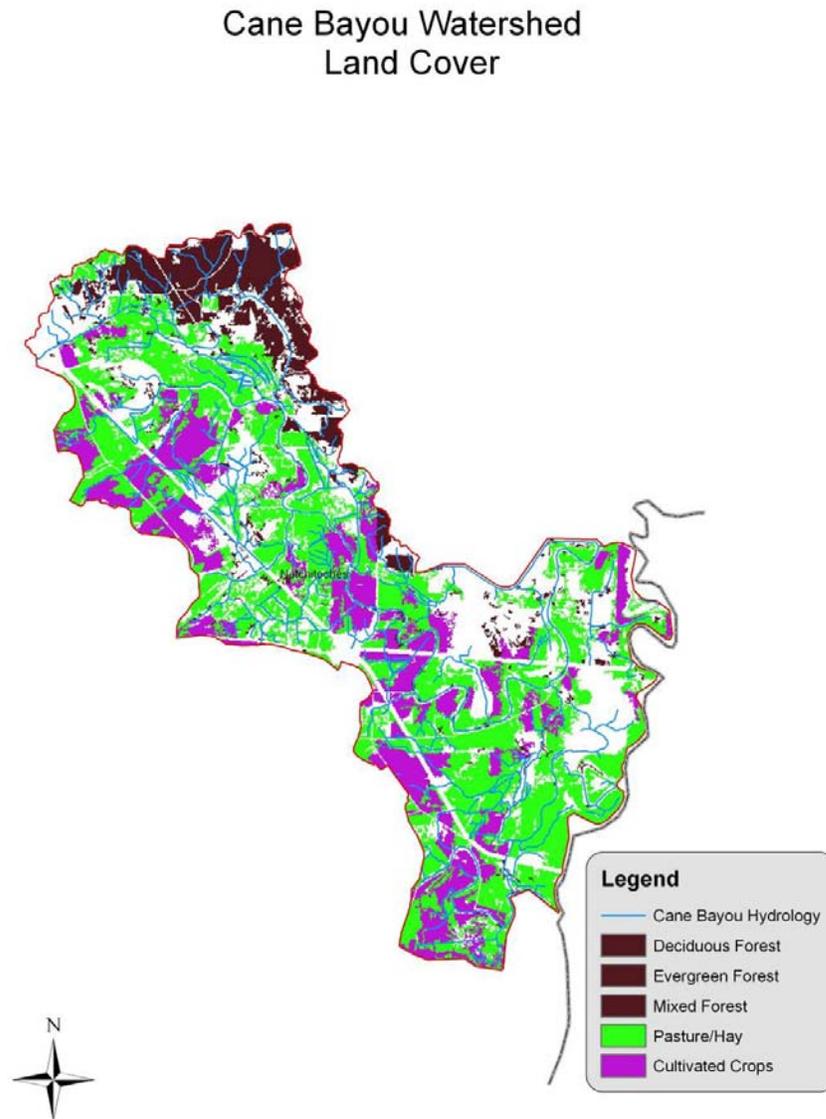
Table 2: Cane Bayou Water Quality Conditions

		PCR	SCR	FWP	DWS	ONR	OYS	AGR	LAL	Impaired Use for Suspected Cause	Suspected Causes of Impairment	IR Category for Suspected Causes	TMDL Due Date	TMDL Priority
Cane Bayou Watershed Assessment		F	F	N				F		FWP	Mercury	IRC5	2007	H
100803	Saline Bayou	F	F	N				F		FWP	Mercury	IRC5	2007	H

Resource Concerns

The primary resource concern identified by stakeholders was sediment loading of streams from cropland. One of the goals of this effort was to identify areas of high risk related to erosion. The cultural and resource characteristics identified by NRCS planning specialists to be considered during the risk assessment included: land use, stream proximity, soil hydrologic group, and land slopes. The land use distribution is depicted in Figure 7.

Figure 7: Land Cover Map

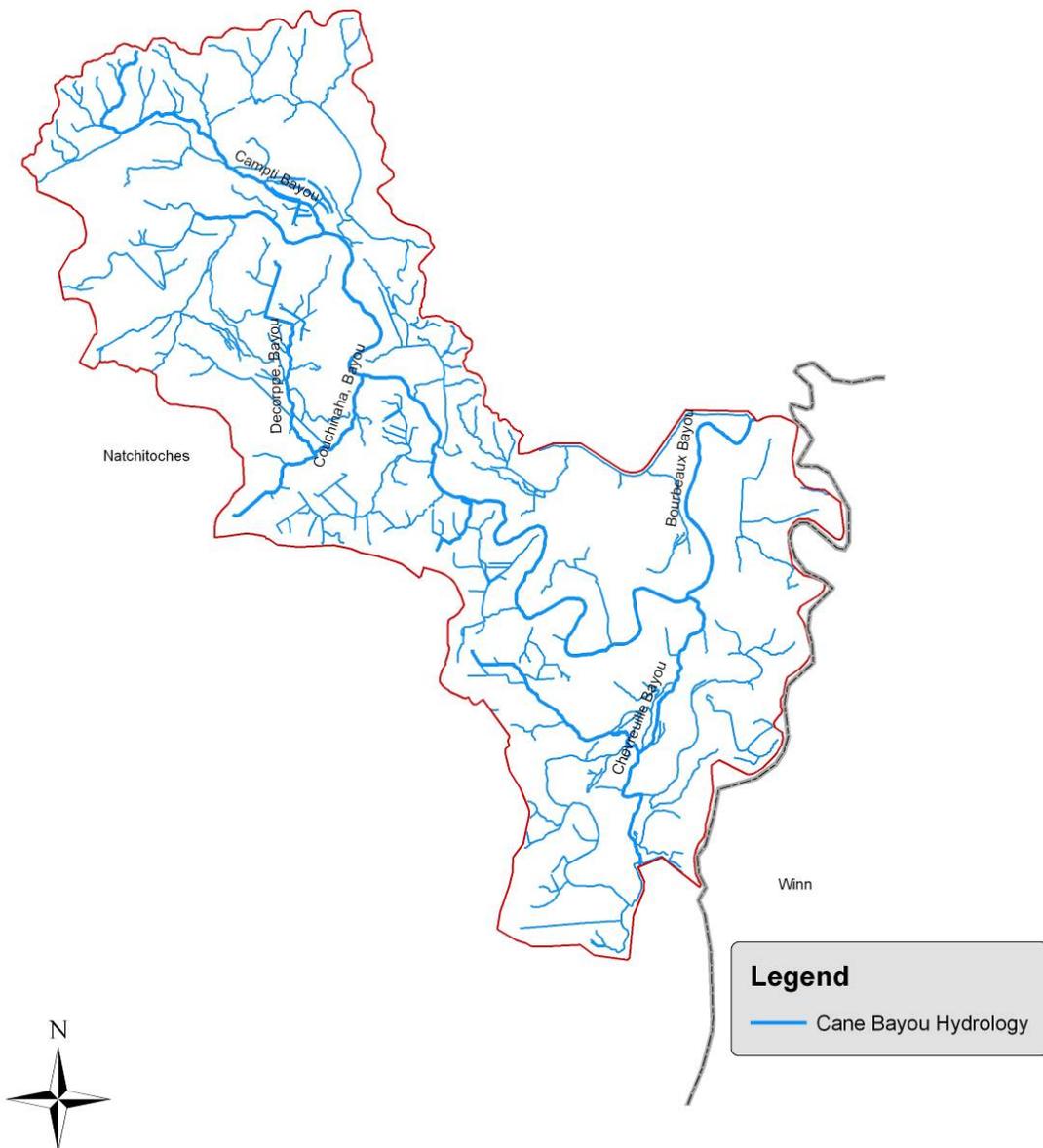


Cane Bayou Stream System

The stream system which is the receiving body of the generated sediment is shown in the map below. The closer a potential contributing area is to a stream the higher the risk for sediment and other pollutant loading. This was the rationale for the proximity factor in the risk matrix.

Figure 8: Cane Bayou Watershed Streams Map

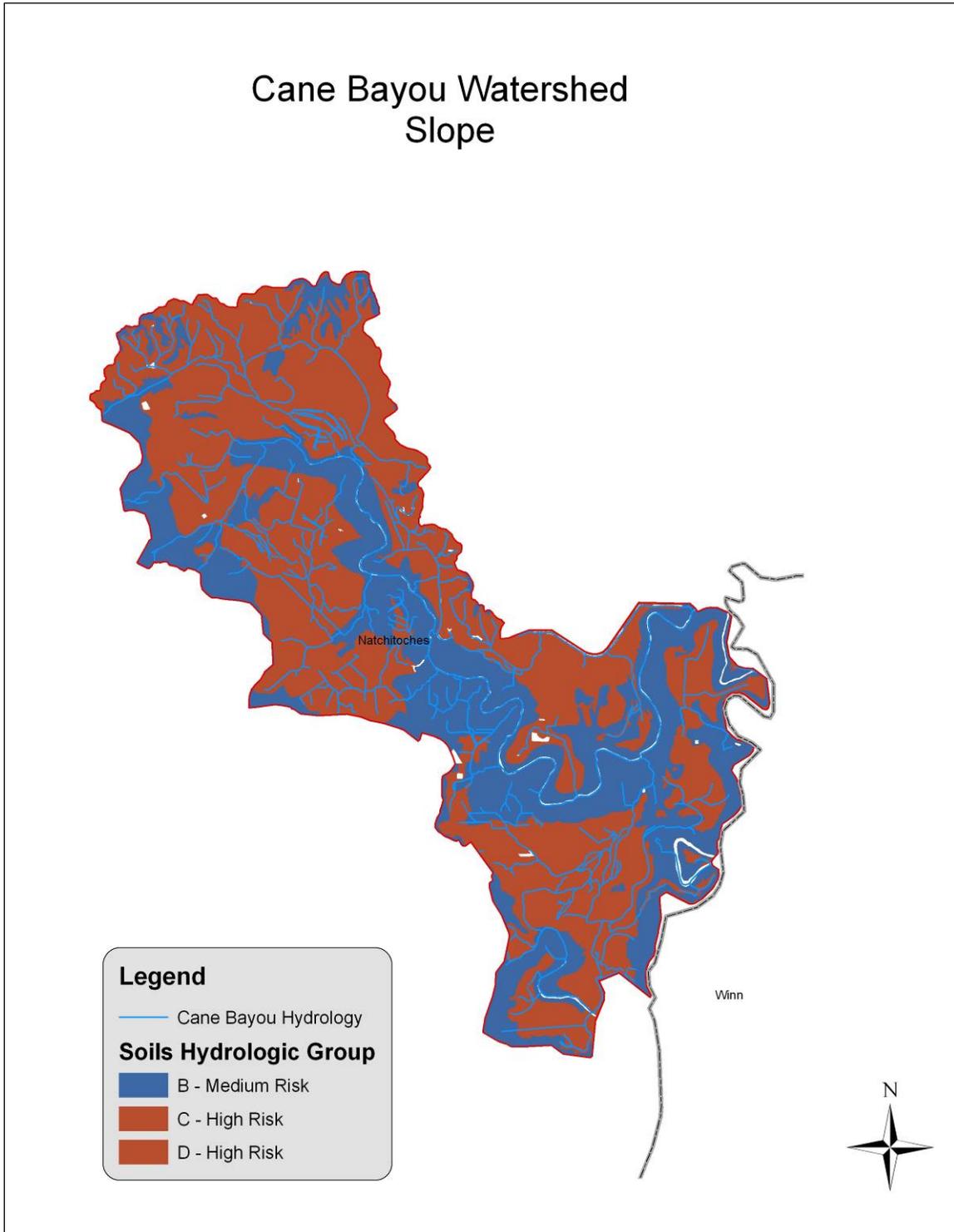
Cane Bayou Watershed Streams



Soils Hydrologic Group

The soils hydrologic functions significantly affect runoff. Those soils in the “C and D” groups have a high degree of runoff. They indicate high risk areas. The map below displays the hydrologic groups within the RWA.

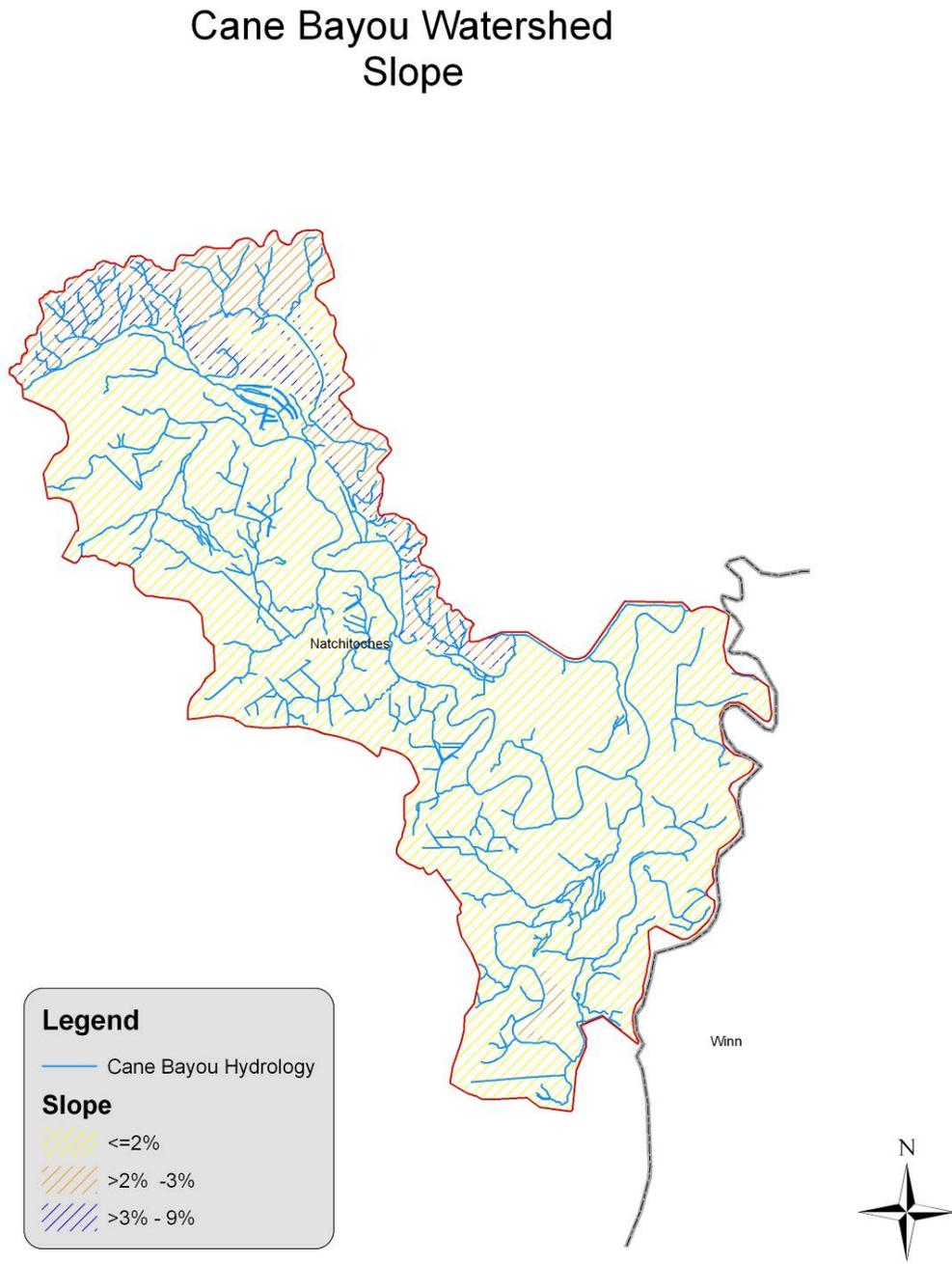
Figure 9: Soils Hydrologic Group Map



Landscape Slope

The landscape slope affects the velocity of runoff therefore the erosion rates which are likely to occur. When looking at the following slope map you will notice steeper slopes are in the northeast portion of the RWA which is most beneficial because most of this area is forest. Forest land cover is less susceptible to erosion.

Figure 10: Landscape Slope Map



Risk Factors

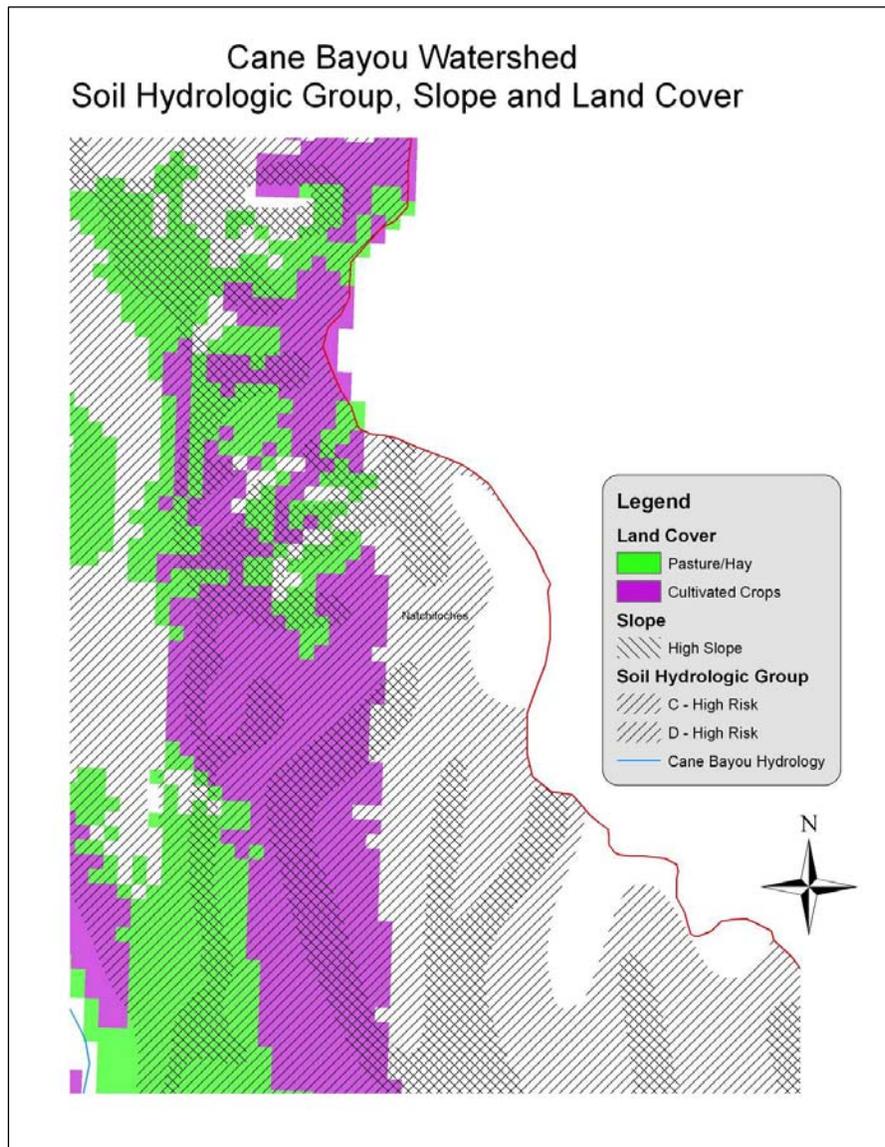
These risk factors were rated individually and cumulatively to define the overall risk of erosion and sediment loading to streams. The risk matrix in Table 2 expresses the concept.

Table 3: Risk Factors Table

RISK	LOW	MODERATE	HIGH
Cropland	Not Present – 1	Present - 3	
Stream Proximity	300 ft.	200 ft.	100 ft.
Soil Hydrologic Group	Low – A(1)	Medium – B(2)	High – C&D(3)
Slope	<3%	3%	4-9%

When this matrix is applied using GIS technology varying levels of risk become apparent. The following map depicts these risk areas. For instance cropland is a high risk land use, “C” and “D” hydrologic groups create a high risk due to runoff potential, and land slopes 3% or greater are also considered high risk areas. The following maps were created by combining these high risk indicators.

Figure 11: Soil Hydrologic Map



The cross hatched areas on cultivated cropland identifies a very high risk area. The cultivated cropland with diagonal lines to the right defines the moderate risk areas. The cross hatched pasture/hay could become a very high risk area if converted to cropland but presently can be considered only moderately at risk.

One treatment consideration is the creation of buffers adjacent to receiving water bodies. These would be vegetative buffers. The need for this treatment increases as a high or moderate risk land use penetrates the proximity risk zones. The following maps depict cropland which is a high risk indicator penetrating into various proximity risk zones. The greatest need for this type of treatment is defined by the areas of deepest penetration by the cropland. The other risk factors further define the risk level associated with the landscape condition.

Figure 12: High Risk Areas Map

Cane Bayou Watershed Soil Hydrologic Group, Slope and Land Cover

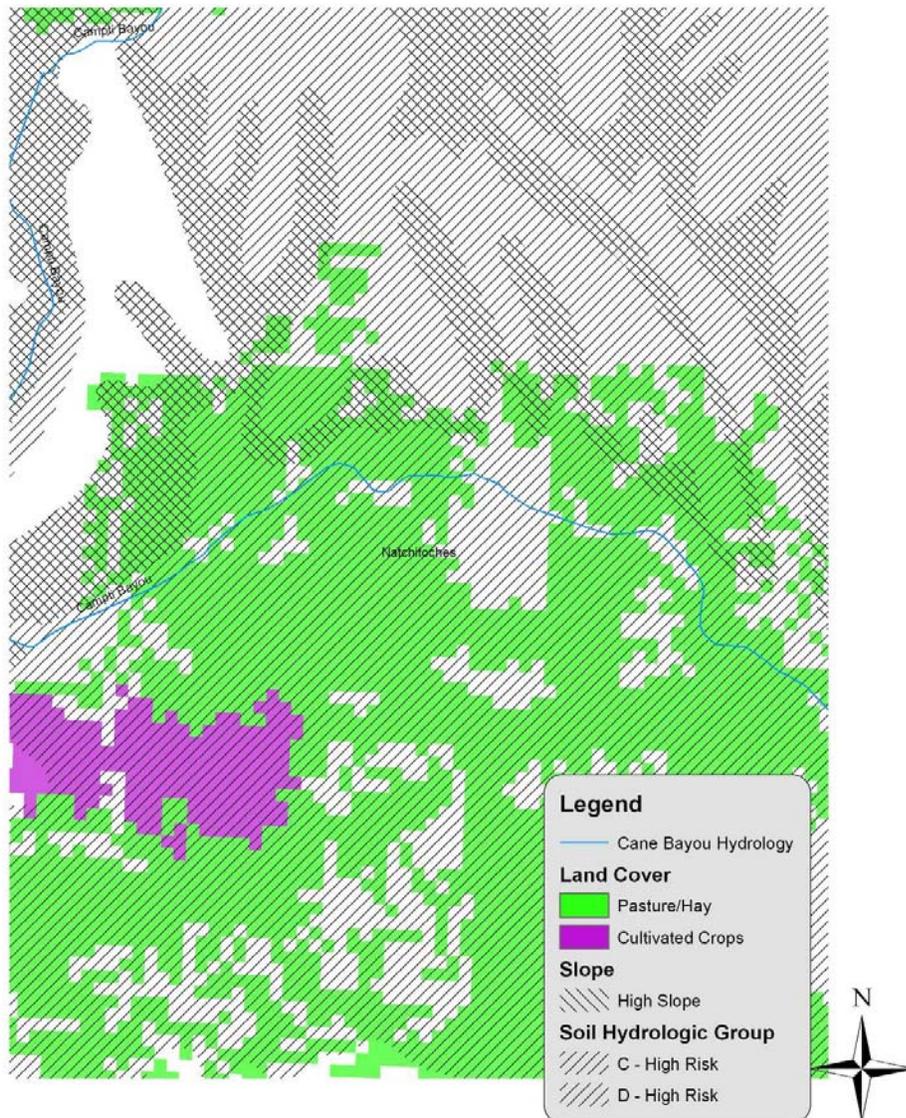


Figure 13: Land Cover w/Stream Buffers Map

Cane Bayou Watershed Land Cover with Stream Buffers

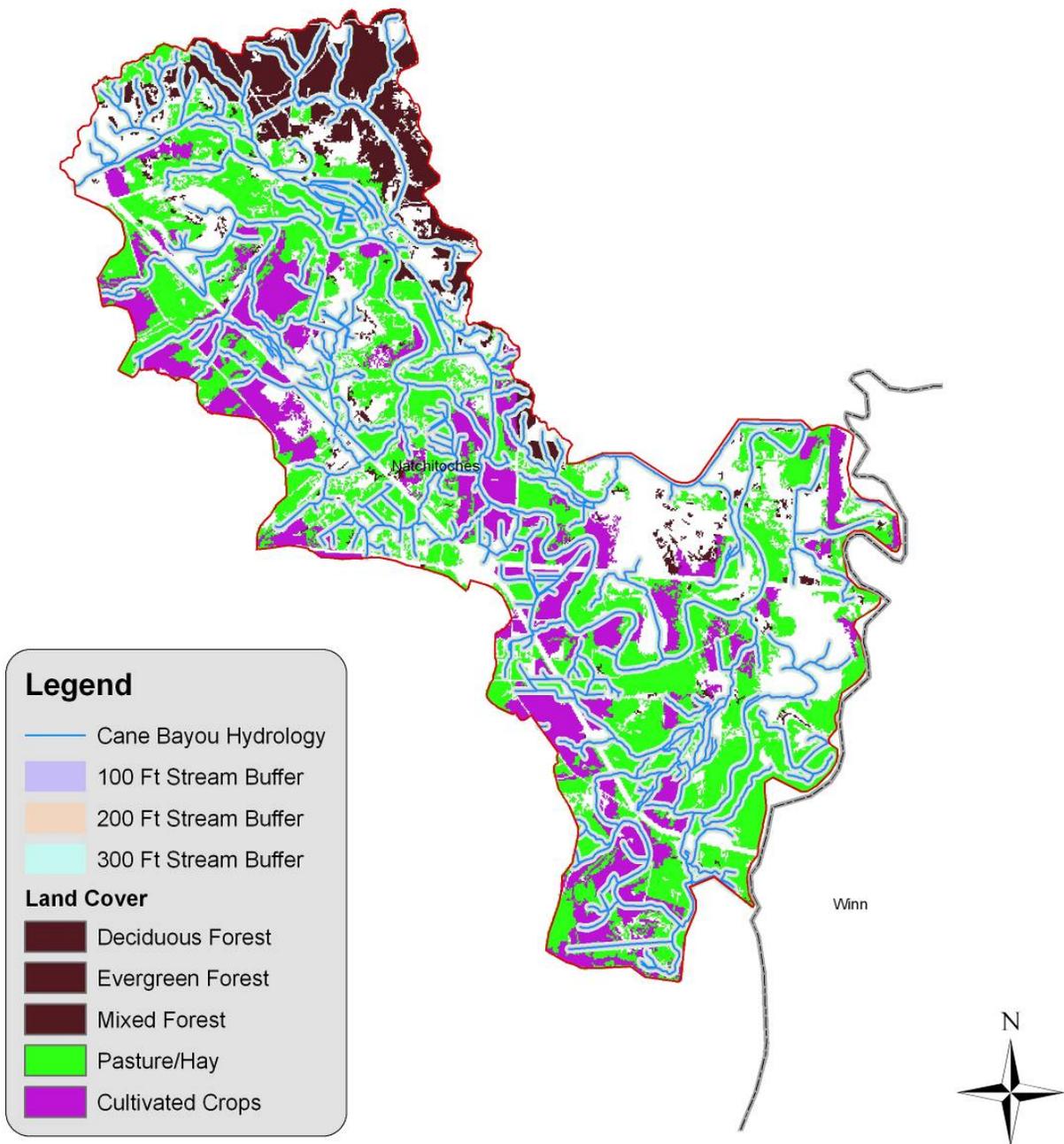
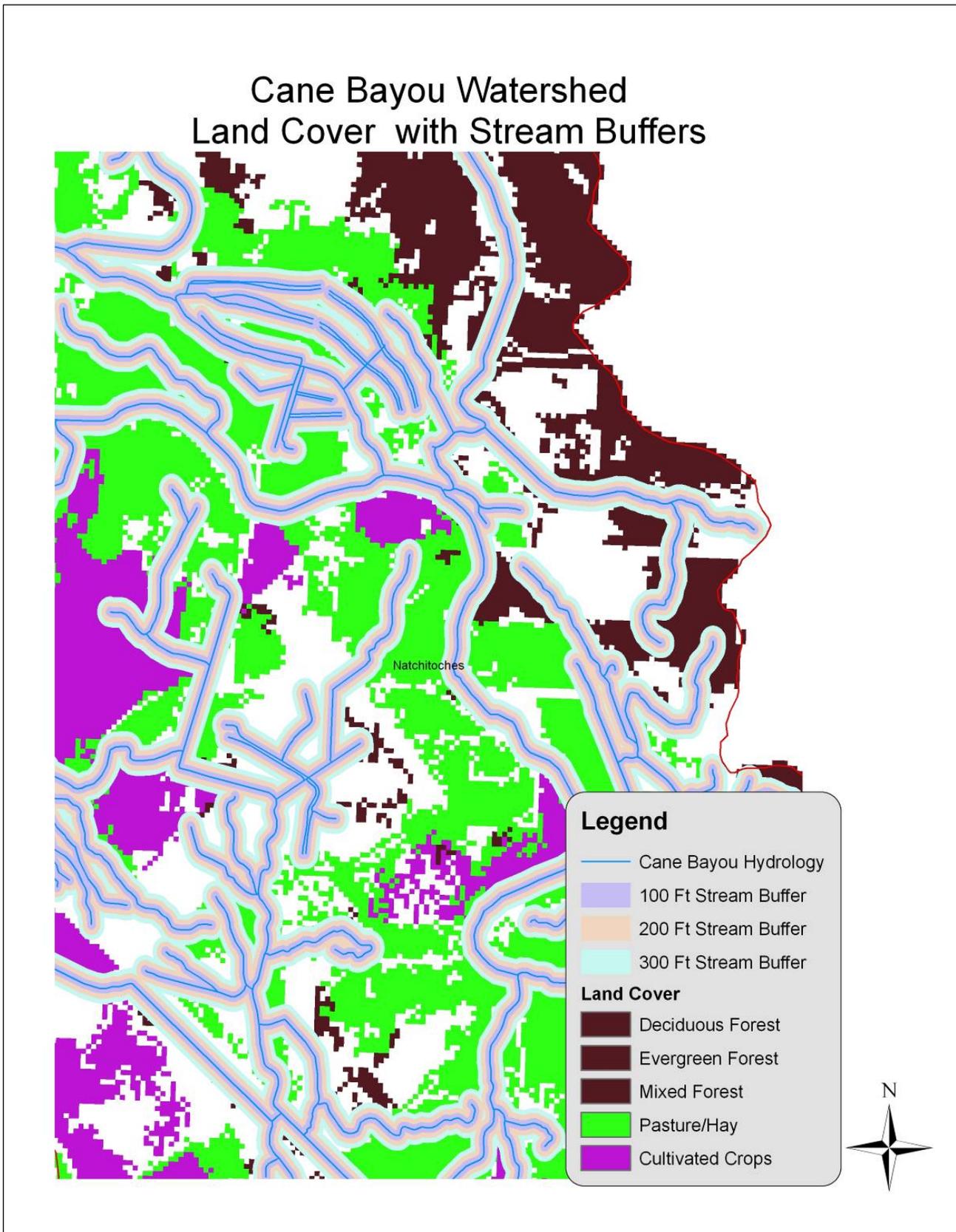


Figure 14: Land Cover w/Stream Buffers Map-closeup



The environmental risk accumulates as risk factor coincidence occurs. When the hydrologic group risk factor is included in the analysis the following map is created. Where a “C” or “D” hydrologic group as indicated by the diagonal lines is present on cropland or pasture adjacent to a stream a significantly higher environmental risk is generated. The following maps depict this situation.

Figure 15: High Risk Stream Buffers Map

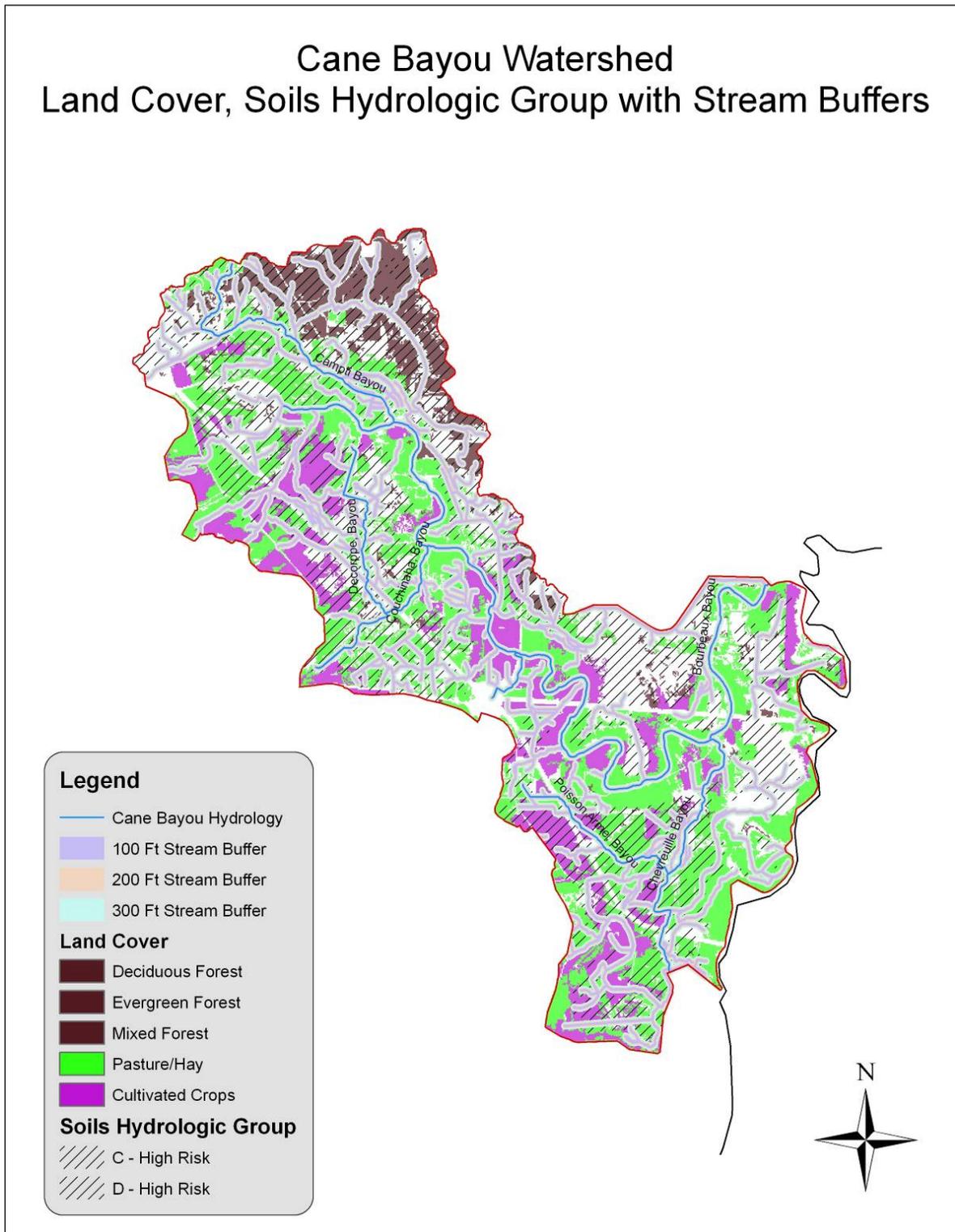
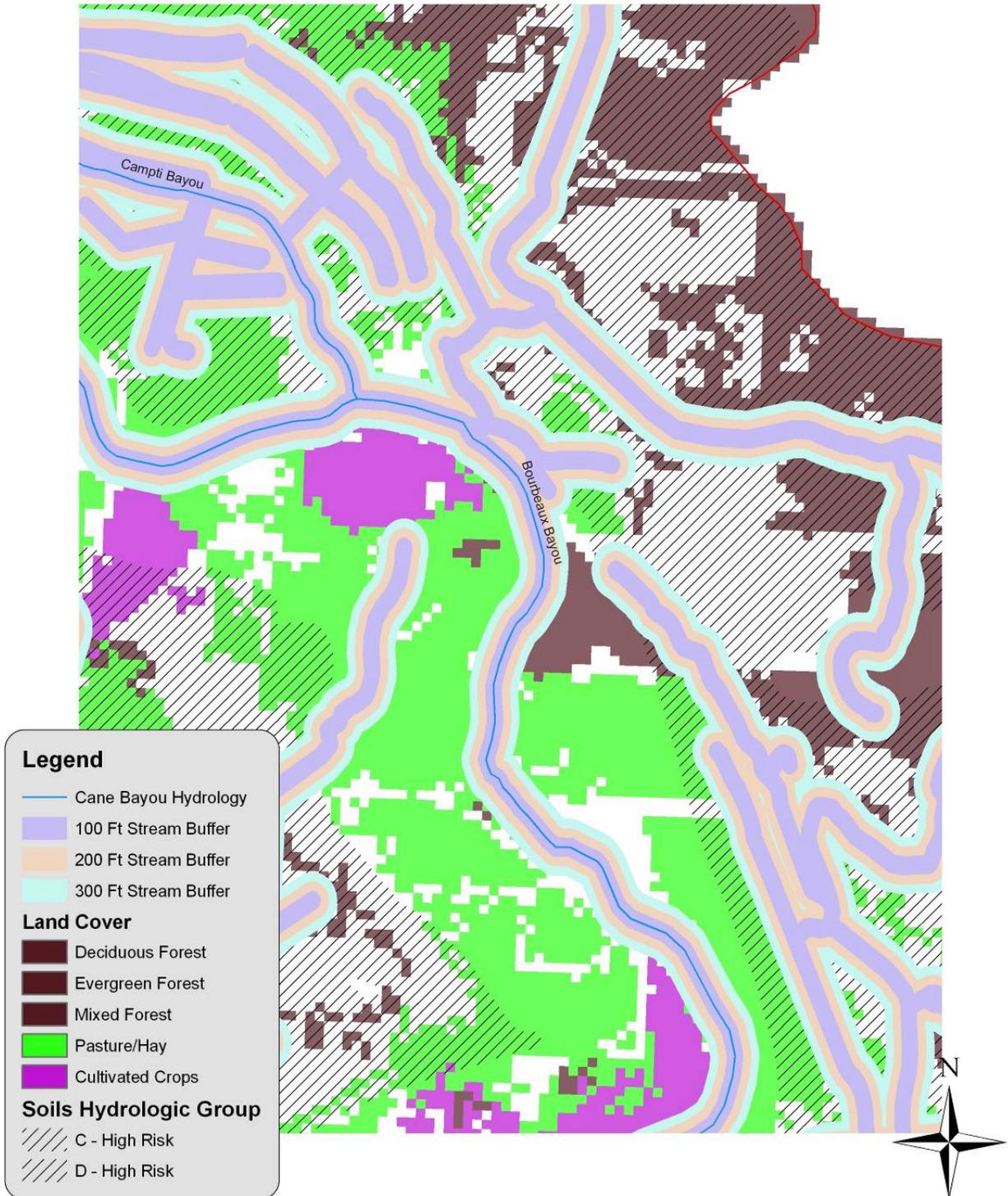


Figure 16: High Risk Stream Buffers Map-closeup

Cane Bayou Watershed Land Cover, Soils Hydrologic Group with Stream Buffers



Cane Bayou Watershed – HUC – 11140208040 – Assessment

Description

This assessment matrix has been developed to provide an estimate of conservation systems which may be needed to address resource concerns identified in the RWA Resource Profile. This can also be described as likely future conditions within the watershed.

Conservation systems have been described in this assessment as systems of conservation practices developed to address resource concerns on various landuses. Systems include benchmark and resource management systems. Benchmarks (BM) systems are best described as land units that have had no treatment or one or more resource concerns treated with conservation practices. Resource management systems (RMS) are described as land units which have all known resource concerns treated with conservation practices. Resource management systems (RMS) are described as land units which have all known resource concerns is credited when the practice(s) used, meet or exceed a predetermined level of treatment, know as quality criteria.

Resource concerns have been described in this RWA. These concerns identified at a public meeting that was held. Other resource concerns likely exist within the watershed but only make up a small percentage of what needs to be treated. Further investigation and analysis will need to be completed in order to better define all resource concerns.

Resource professionals provided an estimate by percent of conservation systems that will likely be applied to BM systems and untreated land units to address resource concerns identified in the resource profile. These systems are not meant to be comprehensive or address all resource concerns for each land unit in the watershed; rather, only the typical system of conservation practices that should be applied. Numerous alternatives and combinations of practices exist that should be made available to landowners and producers in order to meet their desired level of treatment.

Federal programs identified to implement conservation systems include, but are not limited to; Environmental Quality Program (EQIP), Wildlife Habitat Incentive Program (WHIP), and the Wetland Reserve Program (WRP). Other funding available for implementation includes various private, local, and state program funds.

This assessment provides estimates only that have been developed using local conservationist, input from the public, and Performance Results Measurement System (PRMS) data to identify resource concerns, participation rates, and conservation systems likely to be applied. This information was merged with state average cost lists, and estimated operation and maintenance costs to generate a cost estimate by individual practice for each conservation system projected to be applied. Due to inflation and production cost, NRCS update the State's cost list on an annual basis.

Table 4: Cane Bayou Crop Assessment

Rapid Watershed Assessment For:								Future Conditions For:							
NAME: <u>Cane Bayou Watershed HUC 11140208040</u>															
Management Systems		Quantity		Effects*				Implementation							
	Practices	Unit	Quantity	Soil Erosion	Water Quan	Water Qual	Plant Cond	CTA	EQIP	WRP	WHIP	CSP	CRP	CREP	Others
Baseline		AC/NO.													
	No conservation practices being applied at this level														
Progressive															
	No conservation practices being applied at this level														
RMS				(+)	3	(+)	4								
	Grade Stab. Struct. 410	nos.	29					X	X						
	Irrigat. Land Level. 464	acres	1,156					X	X						
	Nutrient Manage. 590	acres	1,156					X	X						
Notes:				Estimated Time Frame = 5 Years											

Note: See attachments for economic analysis

*Note: Effects are numerical values placed on benchmark conditions and degree of change in conditions by conservation system (s) application. Scale ranges from (-) most damaging to resources to (+) best protection offered by treatment.

Table 5: Cane Bayou Crop Variables

Enter Watershed Variables Below										
Watershed Name	Cane Bayou Watershed			Watershed Code	11140208040			Help		
Landuse Type	Crop			Landuse Acres	1,700			Interest Rate	5%	
Typical Unit Size (ac)	40			Percent TA of FA	20%			Cost-Share Rate	50%	
Estimated Time Frame = 5 years	Participation Rate	60%			COMPARE	60%			Calculated Participation Rate	Next
			<i>(Based on Watershed Profile)</i>						<i>(Based on Projected Future Conditions)</i>	
Current Conditions			Projected Change			Projected Future Condition				
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
Baseline	40%	680	Baseline	40%	272	Baseline	16%	272	272	0
			Progressive	0%	0					
			RMS	60%	408					
			<i>Must Total 100%</i>						<i>100%</i>	
Current Conditions			Projected Change			Projected Future Condition				
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
Progressive	40%	680	Progressive	40%	272	Progressive	16%	272	272	0
			RMS	60%	408					
Current Conditions			Projected Change			Projected Future Condition				
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
RMS	20%	340	RMS	100%	340	RMS	68%	1,156	340	816
			<i>Must Total 100%</i>						<i>100%</i>	
Grand Totals	100%	1,700				100%	1,700	884	816	

Table 6: Cane Bayou Crop Assessment Information

WATERSHED NAME & CODE		CANE BAYOU WATERSHED - 11140208040			LANDUSE ACRES		1,700			
LANDUSE TYPE		CROP			TYPICAL UNIT SIZE ACRES		40			
ASSESSMENT INFORMATION					CALCULATED PARTICIPATION				60%	
Conservation Systems by Treatment Level		Benchmark Conditions	Future Conditions			RESOURCE CONCERNS				
		Total Units	Existing Unchanged Units	New Treatment Units	Total Units	Soil Erosion – Irrigation induced	Water Quantity – Inefficient Water Use on Irrigated Land	Water Quality – Excessive Nutrients and Organics in Surface Water	Plant Condition – Productivity, Health and Vigor	
Baseline		System Rating ->			0	0	0	0		
No Conservation Practices being applied at this level		0	0	0	0	0	0	0		
Total Acreage at Baseline		680	272	0	272					
Progressive		System Rating ->			0	0	0	0		
No Conservation Practices being applied at this level		0	0	0	0	0	0	0		
Total Acreage at Progressive Level		680	272	0	272					
RMS		System Rating ->			3	4	3	4		
Grade Stabilization Structure (no.) 410		9	9	20	29	4	4	2	3	
Irrigation Land Leveling (ac.) 464		340	340	816	1,156	4	5	3	4	
Nutrient Management (ac.) 590		340	340	816	1,156	2	2	4	5	
Total Acreage at RMS Level		340	340	816	1,156					

Table 8: Cane Bayou Crop Funding Sources

WATERSHED NAME & CODE		CANE BAYOU WATERSHED - 11140208040						LANDUSE ACRES			1,700	
LANDUSE TYPE		CROP						TYPICAL UNIT SIZE ACRES			40	
POSSIBLE SOURCES OF FUNDING							CALCULATED PARTICIPATION			60%		
Conservation Systems by Treatment Level		FUTURE	FARM BILL					OTHERS			NOTES/COMMENTS	
		New Treatment Units	CTA	EQIP	WRP	WHIP	CSP	CRP/CREP	Fed	State		Local
Progressive												
No Conservation Practices being applied at this level		0										
New Treatment Acreage		0										
RMS												
Grade Stabilization Structure (no.) 410		20	X	X								
Irrigation Land Leveling (ac.) 464		816	X	X								
Nutrient Management (ac.) 590		816	X	X								
New Treatment Acreage		816										

Table 10: Cane Bayou Livestock Variables

Enter Watershed Variables Below										
Watershed Name	Cane Bayou Watershed			Watershed Code	11140208040			Help		
Landuse Type	Livestock			Landuse Acres	5,200			Interest Rate	5%	
Typical Unit Size (ac)	90			Percent TA of FA	20%			Cost-Share Rate	50%	
Estimated Time Frame = 5 years	Participation Rate (Based on Watershed Profile)			60%	COMPARE	60%	Calculated Participation Rate (Based on Projected Future Conditions)			Next
	Current Conditions			Projected Change			Projected Future Condition			
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
Baseline	40%	2,080	Baseline	40%	832	Baseline	16%	832	832	0
			Progressive	0%	0					
			RMS	60%	1,248					
			Must Total 100%			100%				
Current Conditions			Projected Change			Projected Future Condition				
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
Progressive	40%	2,080	Progressive	40%	832	Progressive	16%	832	832	0
			RMS	60%	1,248					
			Must Total 100%			100%				
Current Conditions			Projected Change			Projected Future Condition				
System	Percent	Acres	System	Percent	Acres	System	Percent	Acres		
								Total	Static	Treated
RMS	20%	1,040	RMS	100%	1,040	RMS	68%	3,536	1,040	2,496
Grand Totals									2,704	2,496
	100%	5,200					100%	5,200		

Table 11: Cane Bayou Livestock Assessment Information

WATERSHED NAME & CODE		CANE BAYOU WATERSHED - 11140208040			LANDUSE ACRES	5,200		
LANDUSE TYPE		LIVESTOCK			TYPICAL UNIT SIZE ACRES	90		
ASSESSMENT INFORMATION					CALCULATED PARTICIPATION	60%		
Conservation Systems by Treatment Level	Benchmark Conditions	Future Conditions			RESOURCE CONCERNS			
	Total Units	Existing Unchanged Units	New Treatment Units	Total Units	Water Quality – Excessive Nutrients and Organics in Surface Water	Water Quality – Harmful Levels of Pathogens in Surface Water	Plant Condition – Productivity, Health and Vigor	Domestic Animals – Inadequate Quantities and Quality of Feed and Forage
Baseline					System Rating ->			
No Conservation Practices being applied at this level	0	0	0	0	0	0	0	0
Total Acreage at Baseline	2,080	832	0	832				
Progressive					System Rating ->			
No Conservation Practices being applied at this level	0	0	0	0	0	0	0	0
Total Acreage at Progressive Level	2,080	832	0	832				
RMS					System Rating ->			
No Conservation Practices being applied at this level	0	0	0	0	4	4	5	4
Fence (ft.) 382	92,444	92,444	221,867	314,311	4	4	4	4
Grade Stabilization Structure (no.) 410	23	23	55	79	3	3	2	2
Nutrient Management (ac.) 590	1,040	1,040	2,496	3,536	4	3	5	4
Prescribed Grazing (ac.) 528	1,040	1,040	2,496	3,536	4	4	5	5
Total Acreage at RMS Level	1,040	1,040	2,496	3,536				

Table 13: Cane Bayou Livestock Funding Sources

WATERSHED NAME & CODE		CANE BAYOU WATERSHED - 11140208040						LANDUSE ACRES			5,200
LANDUSE TYPE		LIVESTOCK						TYPICAL UNIT SIZE ACRES			90
POSSIBLE SOURCES OF FUNDING								CALCULATED PARTICIPATION			60%
Conservation Systems by Treatment Level	FUTURE	FARM BILL						OTHERS			NOTES/COMMENTS
	New Treatment Units	CTA	EQIP	WRP	WHIP	CSP	CRP/CREP	Fed	State	Local	
Progressive											
No Conservation Practices being applied at this level	0										
New Treatment Acreage	0										
RMS											
No Conservation Practices being applied at this level	0										
Fence (ft.) 382	221,867	X	X								
Grade Stabilization Structure (no.) 410	55	X	X								
Nutrient Management (ac.) 590	2,496	X	X								
Prescribed Grazing (ac.) 528	2,496	X	X								
New Treatment Acreage	2,496										

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Appendix

Rapid Watershed Assessment Public Meeting

**Rapid Watershed Assessment Public Meeting
Natchitoches Events Center
Natchitoches, LA
August 29, 2007
9:30 AM**

Attendees

Benny Dobson
James W. Scarborough
James Killing
Harry Hawthorne
Glenn Austin
Mimi Stoker
Dexter Sapp
Mike Burns
Nancy McDowell
Gordon Newton
Marty Floyd

Facilitator Benny Dobson
Recorder Nancy McDowell

Opening comments were given by District Conservationist Glenn Austin. Handouts including Rapid Watershed Assessment Fact Sheets, Watershed and Sparta Aquifer Maps, and a questionnaire were made available for each meeting participant. After the opening comments Glenn turned the meeting over to Dexter Sapp. Dexter gave a PowerPoint presentation concerning the overview of the Rapid watershed Assessment process.

Twin Valley RC&D Coordinator, Benny Dobson stated to the group that the next agenda item entailed obtaining input from the public on resource concerns within the watersheds. Benny asked each person in attendance to introduce themselves. Benny gave the ground rules for the portion of this portion of the agenda and then he proceeded to ask for input.

- Water Quality
Discussion There were some discussion as to whether there were any water quality baseline data in place and whether there were any stream segments in the watersheds where water samples have been or are presently being taken from
- Nearest Drinking Water Source to the Three Watershed Areas
- Overgrowth of Vegetation in the Waterbodies

Discussion Participant stated that there is a problem with hydrilla, and Giant Salvinia in some of the waterbodies. There needs to be a more managed approach to control the problem. More integrated management is needed

- Social Issues

Discussion Education of the public is needed. There is a need in the lake areas to identify and control invasive plant species

- More Farm Bill Dollars for Conservation is Needed for Conservation in the Upper Saline Area.

Discussion The public is asking for more aquatic weed control. Participant stated that 85 – 90% of the Upper Saline area is forested, but yet more Farm Bill Dollars are targeted for other commodity crops than for forestry practices

- Education - Need More Commitment to Education/Stewardship for our Land and Water
Discussion The public needs to be educated on being better stewards of our resources such as forestland, pastureland, croplands, and water bodies

- Need Local Commitment for Cost Share Funding

- Flooding is not a Reported Issue

- Is There a Sufficient Quantity of Groundwater in Our Wells for Public Usage

Discussion Since wells are the source of drinking water, what is the quantity of water in the wells

- Supplemental Water Source

Discussion When the water goes down in the local water systems, can water from another system be redirected to the impacted system. It was stated that water from other systems could not be mixed, there is a concern with the chemicals from two different systems. Can't link and switch one system to the other. However one participant did state that there was an incident when the water system in Hagewood, Louisiana stopped working and the City of Natchitoches turned a valve and sent water to Hagewood

- Surface Water

Discussion Need to look at surface water sources for public and private usage if it is safe and available

- Water Levels Going Down in Streams

Discussion Resident lives in Cooley Creek area. The Creek almost totally goes dry now. Participant stated that he would like to see the creek restored back. Another participant stated that the watershed can be impacted by what humans do. Participated stated that you got to get out in the hills in order to get good drinking water. Water levels are on the decline because of Ag or industrial uses

- Cattle Operation – Is Overgrazing a Problem
- Lack of Forestland Practices Not Cost Shared
Discussion Participant stated that everyone that signs up for EQIP get into the program, however conservation dollars are not available for forestland producers
- Buffer on Scenic Streams
Discussion NRCS is trying to insert practices into the Farm Bill to address this issue. The goal is to provide forest landowners with streams traversing their land, an incentive that would allow them to leave the buffer area intact
- Logger Operations
Discussion Participant stated that there are already guidelines in place for buffer zones. Participant referred to guidelines contained in the Master Logger Program
- Recreation – Hunting, Camping, Fishing
Discussion There is a need for improved recreation. Need to maintain and improve wildlife habitat for recreational purposes. There are no incentives for maintaining/improving habitats. Most timber companies have biologist on staff to do wildlife management. Small landowners don't have this. There need to be incentives for private landowners. Participant also stated that waste from private camps is a problem
- Control Burns – Fuel Reduction
Discussion There is a practice in place for fuel reduction
- Utilization of Waste water Treatment
Discussion The septic on many of the camps near some popular waterbodies in the watershed areas have inadequate sewer facilities. Additionally some of the wastewater treatment of some of the smaller municipalities needs to be looked at as well

Closing comments were given by Glenn Austin. Dexter Sapp stated that the final product will be completed in June 2008. Hardcopies will be available and also the document will be posted on NRCS's website. The public will be notified about the final document.