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Mid Pecan Bayou

Recreational Use Attainability Analysis

Project Update Meeting

August 10, 2011
Brownwood, TX

Improving Life through Science and Technology.

Mid Pecan Bayou RUAA

Project Team

- Texas State Soil and Water Conservation Board
  - Provide funding to conduct project
  - Provide the Texas Commission on Environmental Quality (TCEQ) information about project activities
- Texas AgriLife Research
  - Facilitate public participation and stakeholder coordination
- Texas Institute for Applied Environmental Research
  - Field surveys and bacteria source survey

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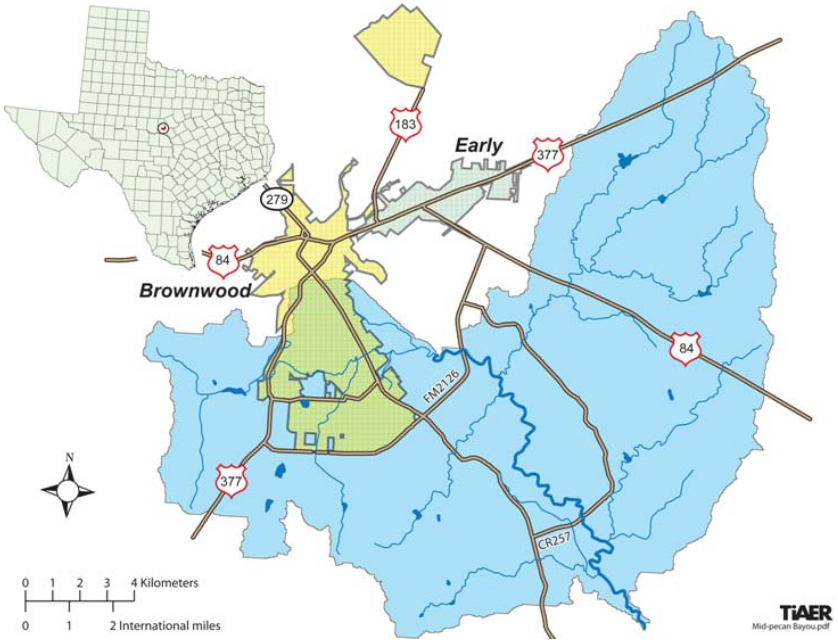
Mid Pecan Bayou



- Mid Pecan Bayou is located in Brown County, southeast of Brownwood and extends from a point immediately upstream of the confluence of Mackinally Creek to a point immediately upstream of Willis Creek.
- First listed on the 2006 303(d) List for elevated levels of bacteria

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Project Funding

Provided through a State General Revenue Nonpoint Source grant from Texas State Soil and Water Conservation Board.

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2010 Integrated Report

DRAFT 2010 Texas Water Quality Inventory: Assessment Results for Basin 14 - Colorado River (February 5, 2010)

AUID 1431_01 Entire water body

USE Recreation Use

Method	Parameter	ASMT Start Date	ASMT End Date	# Assd	Mean assd	# exceed	Mean exceed	Criteria	DS Qual	LOS	CF	Int LOS	TCEQ Cause	Cat
Bacteria Single Sample	E. coli	12/1/2001	11/30/2008	26		5	4296.4	394.00	AD	FS	☐	FS		
Bacteria Single Sample	Fecal coliform	12/1/2001	11/30/2008	7		1	13600	400.00	SM	NC	☐	NC		
Bacteria Geomean	E. coli	12/1/2001	11/30/2008	26	227.7			126.00	AD	NS	☐	NS	bacteria	5b
Bacteria Geomean	Fecal coliform	12/1/2001	11/30/2008	7	257.5			200.00	SM	CN	☐	CN		

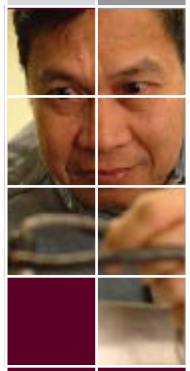
USE General Use

Method	Parameter	ASMT Start Date	ASMT End Date	# Assd	Mean assd	# exceed	Mean exceed	Criteria	DS Qual	LOS	CF	Int LOS	TCEQ Cause	Cat
Water Temperature	Temperature	12/1/2001	11/30/2008	29		0		32.20	AD	FS	☐	FS		
High pH	pH	12/1/2001	11/30/2008	29		0		9.00	AD	FS	☐	FS		
Low pH	pH	12/1/2001	11/30/2008	29		0		6.50	AD	FS	☐	FS		
Dissolved Solids	Chloride	12/1/2001	11/30/2008	29	115.9			410.00	AD	FS	☐	FS		
Dissolved Solids	Sulfate	12/1/2001	11/30/2008	29	86.72			120.00	AD	FS	☐	FS		
Dissolved Solids	Total Dissolved Solids	12/1/2001	11/30/2008	32	578.3			1,100.00	AD	FS	☐	FS		
Nutrient Screening Levels	Ammonia	12/1/2001	11/30/2008	28		0		0.33	AD	NC	☐	NC		
Nutrient Screening Levels	Chlorophyll-a	12/1/2001	11/30/2008	29		5	27.34	14.10	AD	NC	☐	NC		
Nutrient Screening Levels	Nitrate	12/1/2001	11/30/2008	29		22	16.75	1.95	AD	CS	☐	CS	nitrate	
Nutrient Screening Levels	Orthophosphorus	12/1/2001	11/30/2008	28		21	1.7	0.37	AD	CS	☐	CS	orthophosphorus	
Nutrient Screening Levels	Total Phosphorus	12/1/2001	11/30/2008	29		21	1.87	0.69	AD	CS	☐	CS	total phosphorus	

USE Fish Consumption Use

Method	Parameter	ASMT Start Date	ASMT End Date	# Assd	Mean assd	# exceed	Mean exceed	Criteria	DS Qual	LOS	CF	Int LOS	TCEQ Cause	Cat
HH Bioaccumulative Toxics in water	Chromium	12/1/2001	11/30/2008	1	2			3,320.00	ID	NA	☐	NA		
HH Bioaccumulative Toxics in water	Lead	12/1/2001	11/30/2008	1	0.5			25.30	ID	NA	☐	NA		

EPA Approved WQ Standards



Recreation Uses	Indicator Bacteria Geometric Mean Criteria (colonies/100 ml)	
	E. coli (FW)	Enterococci (SW)
Previous Standards:		
Contact recreation	126	35
Noncontact rec.	605	168
Adopted Standards:		
Primary contact	126	35
Secondary contact 1	630	175
Secondary contact 2	1030	--
Noncontact rec.	2060	350

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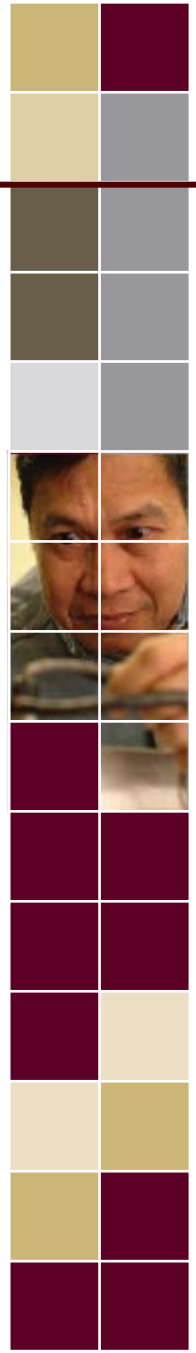
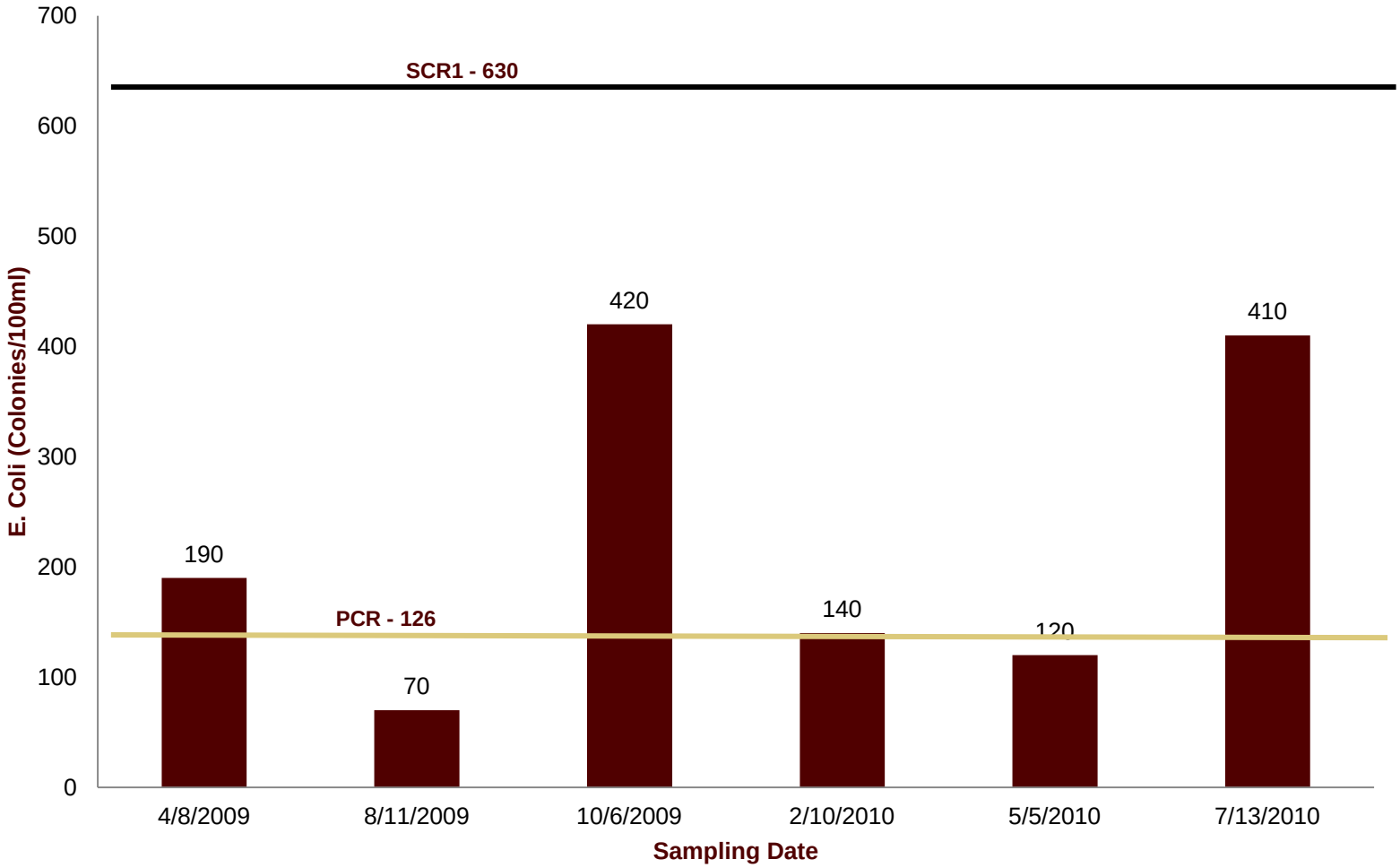
Most Recent LCRA/TCEQ Data





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Mid Pecan Bayou RUAA

Goals and Objectives

- Collect information on factors affecting attainment of recreational use
- Ensure public participation and coordinated stakeholder involvement in decision-making
- Assess possible sources of bacteria

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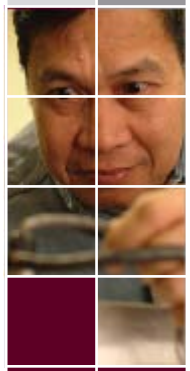
RUAA Components



Stream Surveys

Photographic Record

Historical Information

Interviews

Bacteria Source Survey

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Mid Pecan Bayou RUAA

Time Frame and Milestones

- August 2010 - Project start date
- February 22, 2011 - Public Meeting
- May 4, 2011 - Sanitary Survey Design Meeting
- RUAA Field Surveys
  - #1 June 10-11, 2011
  - #2 Scheduled for Labor Day Weekend

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Mid Pecan Bayou RUAA

Time Frame and Milestones

- May-November 2011
  - Bacteria Source Survey
- August 10, 2011 - Progress Update Meeting
- November 2011 - Technical Report on Bacteria Source Survey
- January 2012 - Technical Report on RUAA activity

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Project Website

- http://www.tsswcb.state.tx.us/managementprogram/mpbruaa

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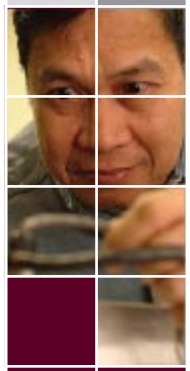
Comments



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