

Water Monitoring Solutions



Big Cypress Creek Bacteria Assessment Study

Comprehensive Recreational Use Attainability Analysis

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Water Monitoring Solutions, Inc.



Comprehensive Recreational Use Attainability Analysis

- **Purpose:** determine if a change of designated use classification is needed
- Intensive assessment of stream uses through local interviews
- Field sampling events with observations and data collection



RUAA Schedule

- 1st round conducted Memorial Day through June 2nd
- 2nd round conducted July 4th weekend



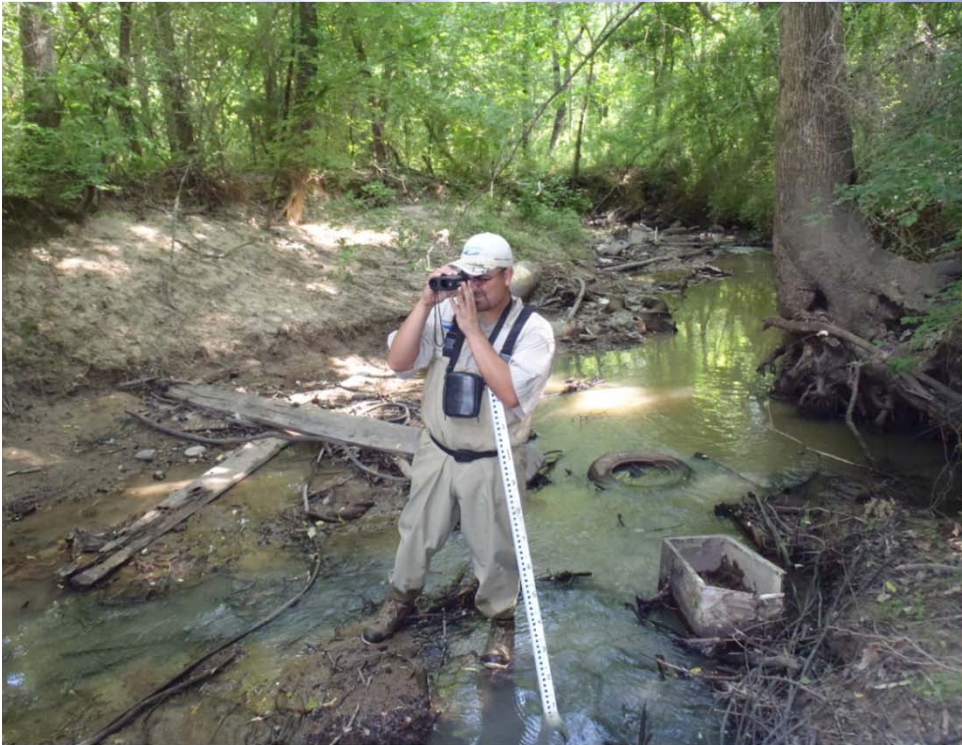
RUAA Procedures

- Mark sample reach (300 m)
- Flow measurement
- Depth and width measurements (30 m)
- Photographic record (30, 150, 300 m)
- Record recreational use observations
- Interviews

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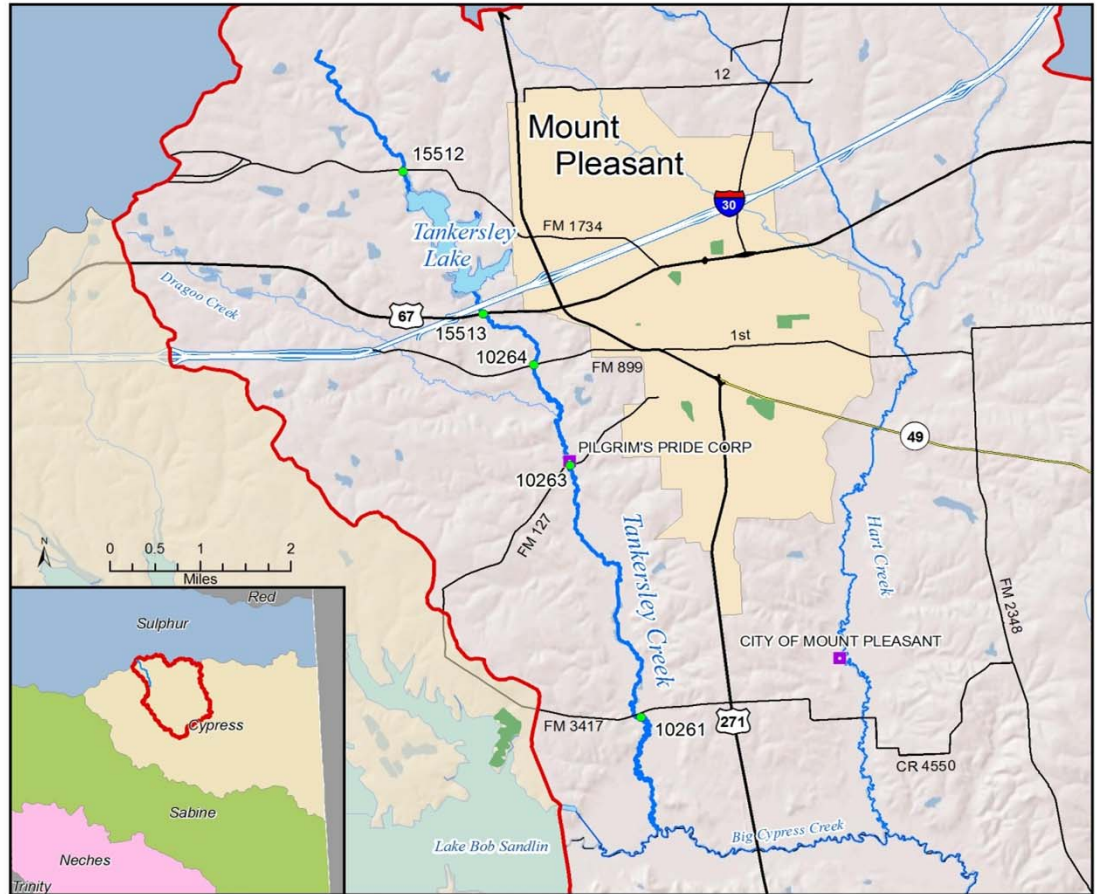


Methods





Tankersley Creek Stations



<p>Tankersley Creek Segment 0404B</p> <p>Recreational Use Attainability Analysis</p>	<ul style="list-style-type: none"> ● Stations ■ WWTP ■ Parks 	<p>300m Assmt Unit</p> <p>Water Monitoring Solutions</p> <p>July 2011</p>
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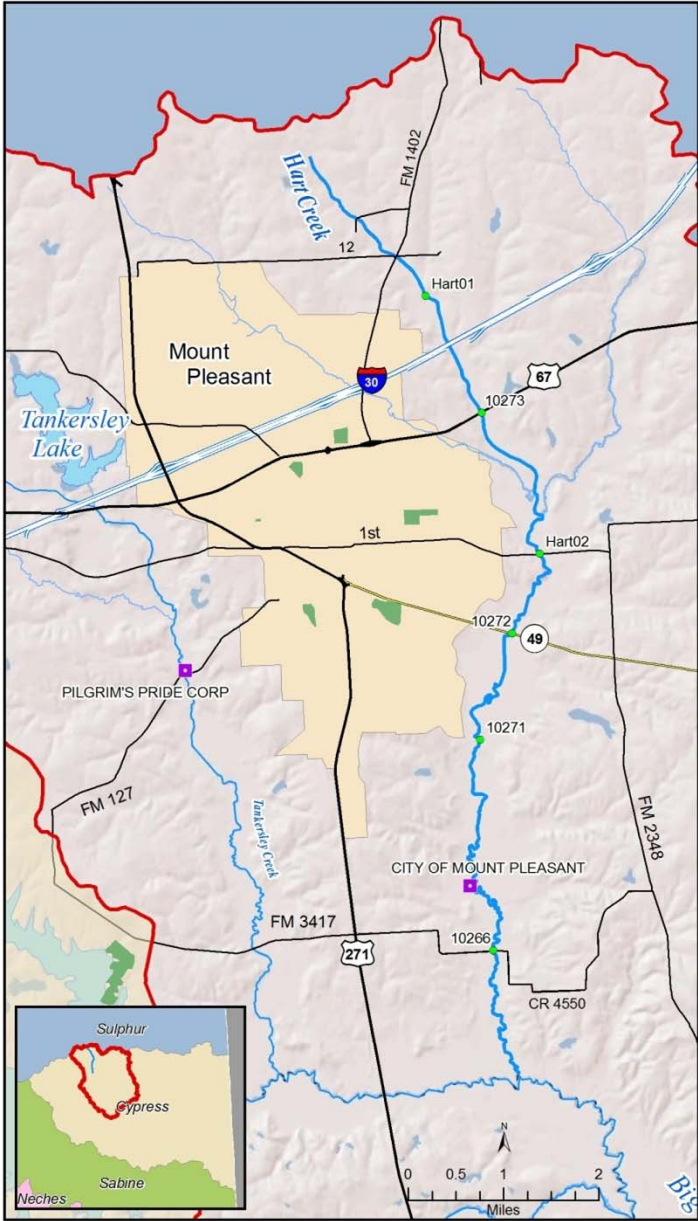


Tankersley Creek Results

Station	Memorial Day			July 4th		
	Avg. Width	Avg. Thalweg	Flow (cfs)	Avg. Width	Avg. Thalweg	Flow (cfs)
15512	16.1	1.75	N/A	13.5	1.63	N/A
15513	5.3	0.70	0.01	6.8	0.75	0
10264	5.3	0.61	0.01	5.6	0.66	0.01
10263	5.3	0.65	6.6	5.1	0.59	3
10261	3.1	0.35	1.6	5.1	0.59	5.9
Average	7.0	0.8	2.1	7.2	0.8	2.2



Hart Creek Stations



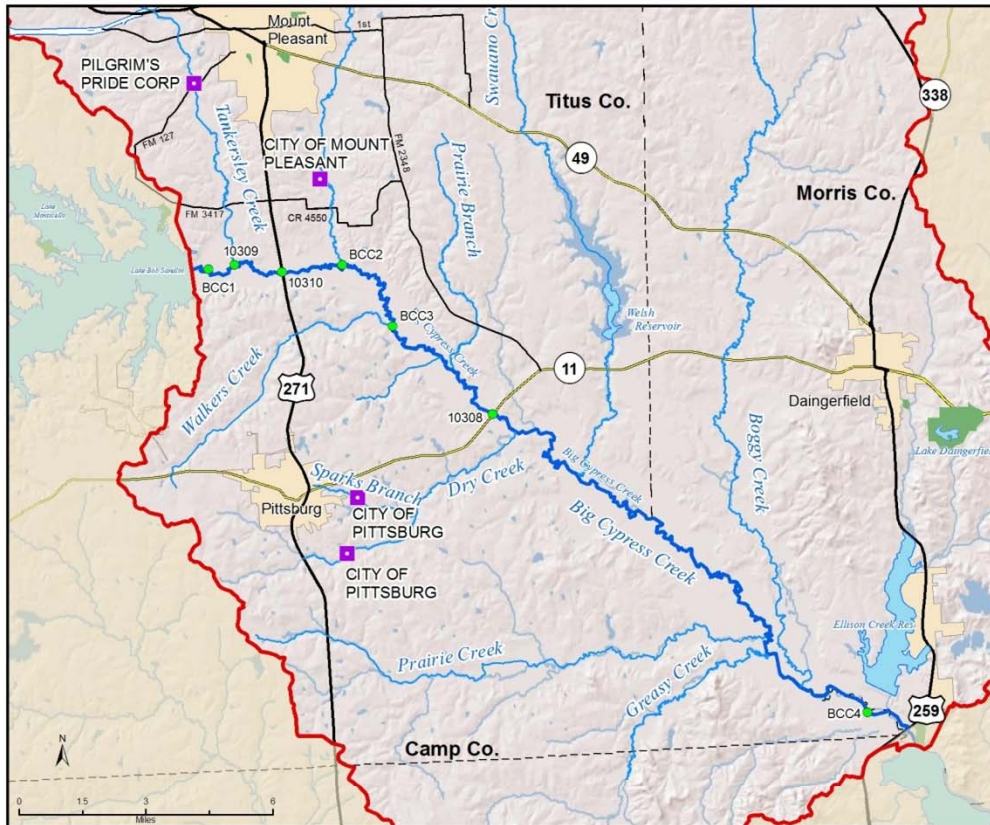
<p>Hart Creek Segment 0404C</p> <p>Recreational Use Attainability Analysis</p>		<p>■ WWTP</p> <p>● Hart Creek Stations</p> <p>■ Parks</p>	<p>— 300m Assessment Unit</p> <p>Water Monitoring Solutions</p> <p>July 2011</p>
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Hart Creek Results

Station	Memorial Day			July 4th		
	Avg. Width	Avg. Thalweg	Flow (cfs)	Avg. Width	Avg. Thalweg	Flow (cfs)
Hart01	3.0	0.31	0.01	2.7	0.31	0.01
10273	5.7	0.72	0	5.5	0.59	0.01
Hart02	3.9	0.37	0.3	3.8	0.33	0.2
10272	4.8	0.55	0.2	4.2	0.38	0.2
10271	3.3	0.17	0.2	2.9	0.15	0.2
10266	5.3	0.46	3.8	5.1	0.51	1.85
Average	4.3	0.4	0.8	4.0	0.4	0.4


Big Cypress Creek Stations



Big Cypress Creek (0404)
Recreational Use Attainability Analysis

- Big Cypress Creek Watershed
- Monitoring Station
- WWTP
- Assessment Units
- Parks

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July 2011





Big Cypress Creek Results

Station	Memorial Day			July 4th		
	Avg. Width	Avg. Thalweg	Flow (cfs)	Avg. Width	Avg. Thalweg	Flow (cfs)
BCC1	44.8		0.3	43		0.2
10309	7.3	0.86	0.3	6.6	0.61	0.2
10310	13.8		2.8	12.9	1.2	5.4
BCC2	9.7	0.75	2.7	7	0.58	3.7
BCC3	13	0.79		12.8	0.97	
10308	9.8		13	9.9	1.18	12
BCC4	35.5		N/A	42.6	2.26	N/A
Average	19.1	0.8	3.8	19.3	1.1	4.3



Observed Stream Uses

- Wildlife
- Livestock
- Fishing



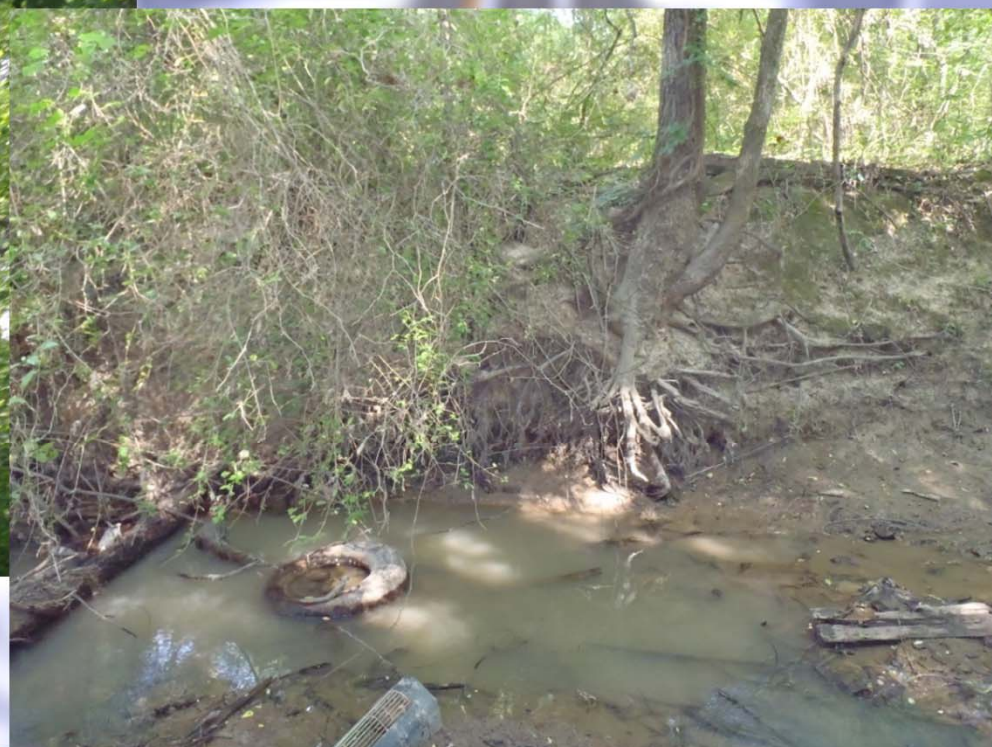
Conditions that Impede Recreational Use

- Steep Banks
- Thick Vegetation
- Murky Water
- Soft Sediment
- Channel Obstructions
- Wildlife/Snakes
- Private Property/Fences
- Depth





Conditions that Impede Recreational Use





Results

- No one was observed at any station on Tankersley or Hart Creeks
- No evidence of recreation at any station on Hart Creek
- Evidence of fishing on Tankersley Creek between FM 1734 and Tankersley Lake



Results (cont.)

- The only people observed during study were fishing from a boat below Ft. Sherman Dam – site access is limited to TCFWSD employees
- Evidence of fishing at SH 11 and Sand Crossing
- Interviews with USACE, TPWD, TCFWSD and landowners confirmed these observations

Where Did You Go?

**Lake Bob Sandlin
on Memorial Day**



Town Lake on July 2nd





Attendee Input:

How do you use these streams?

Are you aware of anyone swimming or fishing in these streams?

Is another recreational use standard appropriate?

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QUESTIONS?



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For Additional Information:

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