

**ATTOYAC BAYOU WATERSHED
ASSESSMENT AND WATERSHED
PROTECTION PLAN DEVELOPMENT
APRIL 28, 2010**



CASTILAW

ENVIRONMENTAL SERVICES, LLC

NACOGDOCHES, TX SULPHUR SPRINGS, TX

936-559-9991

903-885-0304

ATTOYAC BAYOU IMPAIRMENT

- On 2004 Texas 303(d) List for not meeting bacteria standard
- Screening level concern for ammonia levels

WHAT DOES THIS IMPAIRMENT MEAN?

- E. coli levels in Attoyac Bayou are higher than state standards
- Action must be taken to improve water quality to meet state standards by 2017; otherwise, regulatory measures are likely to be implemented (i.e. TMDL will be developed)

WHAT IS A WPP?

- **Voluntary** plan developed by stakeholders
- Holistic approach to watershed management which addresses potential sources and causes of concerns/impairments. This approach also considers:
 1. Load Reductions,
 2. Management Measures,
 3. Assistance Needed,
 4. Public Information and Education,
 5. Implementation,
 6. Milestones,
 7. Measure Success, and
 8. Monitoring

PROJECT TEAM

- Texas Water Resources Institute,
- Texas AgriLife Research,
- Stephen F. Austin State University,
- Pineywoods RC&D,
- Angelina & Neches River Authority, and
- Castilaw Environmental Services, LLC

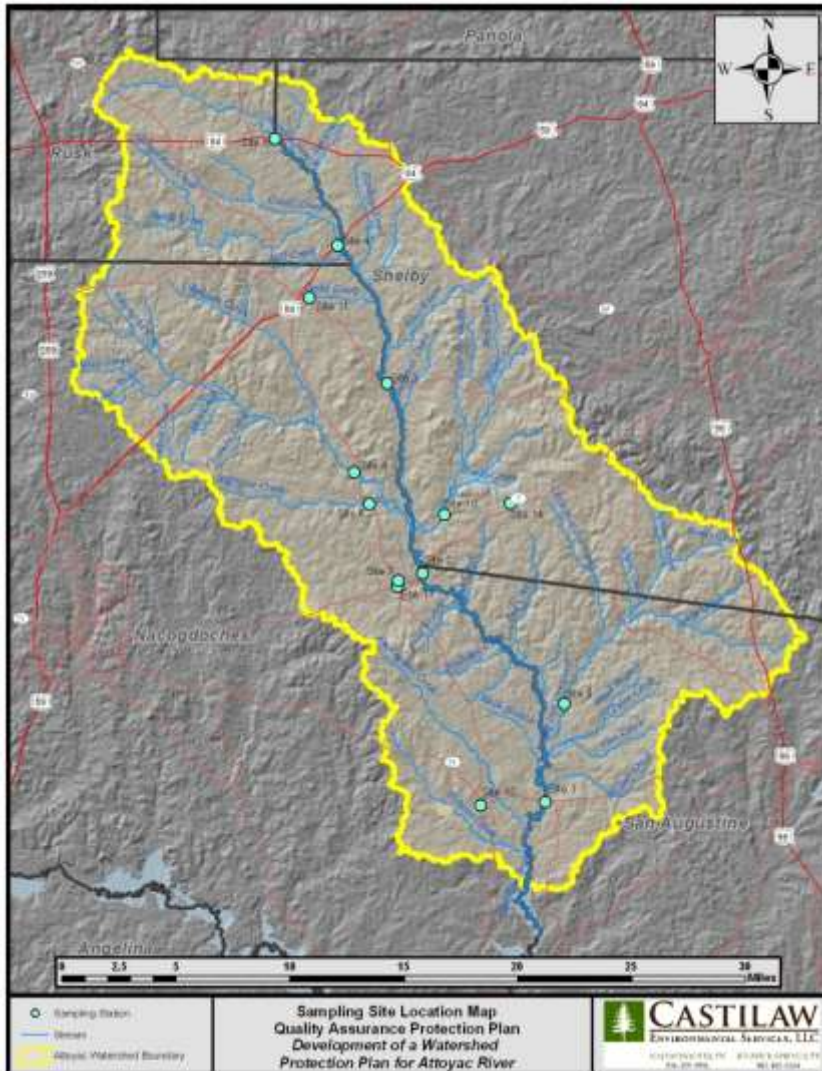
PROJECT GOAL

- Collect data in Attoyac Bayou Watershed to better characterize hydrology and E. coli levels, assess uses of the water body, and ultimately develop a plan that reduces E. coli.

PROJECT TASKS

- Coordinate stakeholder involvement (1st meeting in June),
- Conduct watershed survey and update GIS information,
- Surface water quality monitoring,
- LDC and SELECT Modeling,
- Recreational Use Attainability Analysis,
- Bacterial Source Tracking, and
- Development of Watershed Protection Plan

WATER QUALITY SAMPLING SITES



Attoyac Bayou Sampling Site Locations

TCEQ				GPS Coordinates	
Site #	Station #	Sample Type	Sampling Site Name	Lat: 31° N	Long: 94° W
Stream Sampling Sites					
1	10636	Routine	Attoyac Bayou @ SH 21	30°15.05"	18°13.99"
2	15253	Routine/ Storm	Attoyac Bayou @ SH 7	38°54.00"	23°50.00"
3	TBD	Routine	Attoyac Bayou @ FM 138	46°6.53"	25°32.30"
4	16076	Routine	Attoyac Bayou @ US 59	51°24.14"	27°49.89"
5	TBD	Routine	Attoyac Bayou @ US 84	55°26.97"	30°41.07"
6	16083	Routine	Waffelow Creek @ FM 95	41°29.99"	26°16.00"
7	16084	Routine	Terrapin Creek @ FM 95	38°20.01"	24°53.08"
8	TBD	Routine	Naconiche Creek @ FM 95	42°43.80"	26°57.86"
9	TBD	Routine/ Storm	Big Iron Ore Creek @ FM 354	33°57.43"	17°22.05"
10	TBD	Routine	West Creek @ FM 2913	41°10.33"	22°50.37"
Wastewater Treatment Plant Sampling Sites					
11	TBD	Quarterly	City of Garrison WWTF	49°21.86"	29°2.82"
12	TBD	Quarterly	Chireno ISD WWTF	30°3.13"	21°6.30"
13	TBD	Quarterly	Martinsville ISD WWTF	38°32.29"	24°52.99"
14	TBD	Quarterly	City of Center WWTF	41°38.80"	19°56.66"

TBD will be replaced with TCEQ approved Station Location ID Number once obtained

PROJECT FUNDING

- Funding is being provided through a Clean Water Act §319(h) Nonpoint Source Grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency