

Atascosa River  
Historical Perspective  
&  
Aquatic Life Use-Attainability  
Analysis Study

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# Historical Perspective

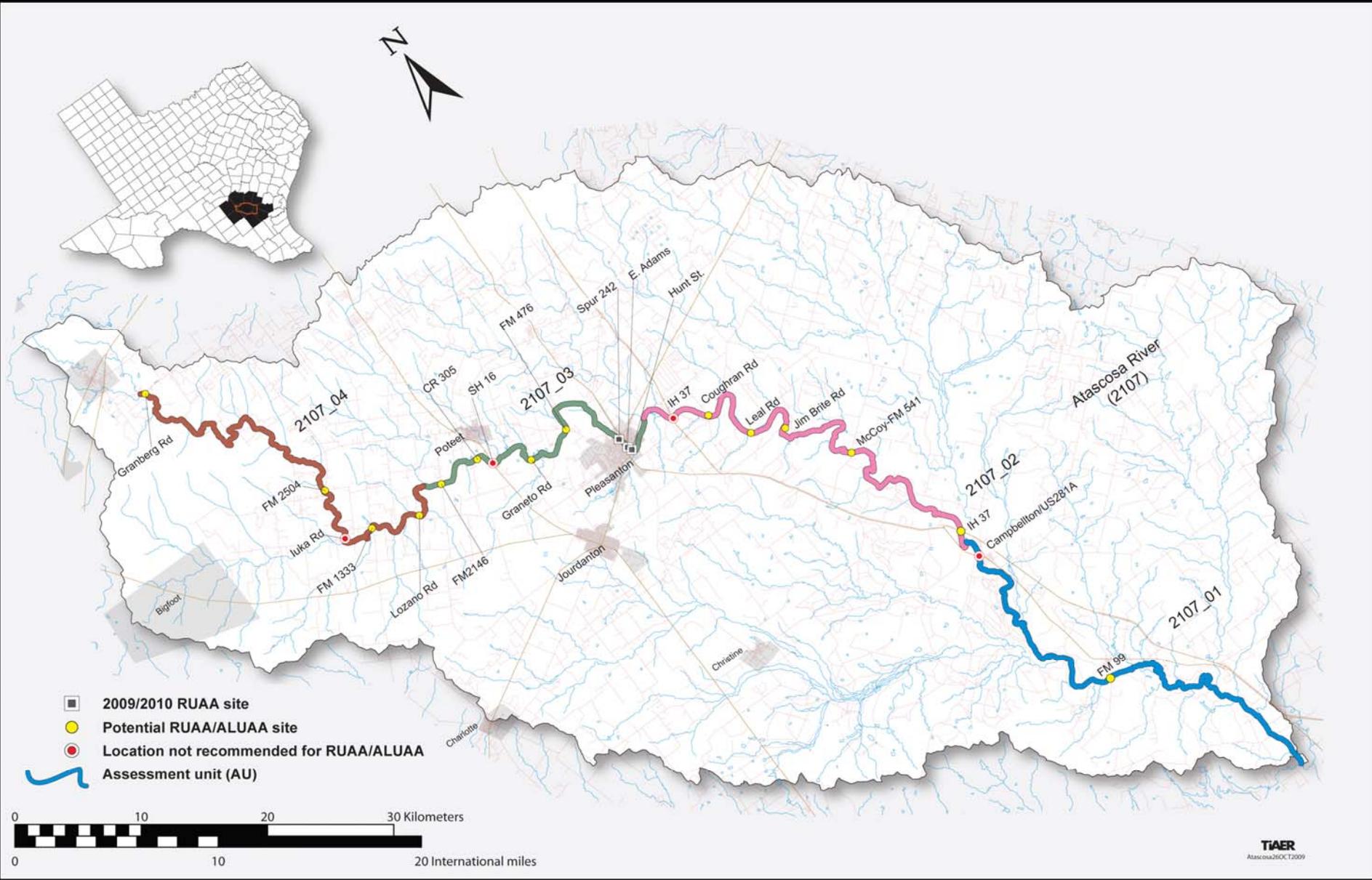
## Aquatic Life Use

1. First year Atascosa on 303(d) list for depressed dissolved oxygen - 1996
2. First year Atascosa on 303(d) list for impaired fish community - 2006

# Designated Aquatic Life Use for Segment 2107

- High aquatic life use
- Protecting criteria
  - Mean dissolved oxygen concentration = 5.0 mg/L
  - Minimum dissolved oxygen concentration = 3.0 mg/L

# Atascosa River showing Assessment Units



# Atascosa River (Segment 2107)

## Source: TCEQ 2008 Assessment Data

AU	Number of Samples	24-hr Average DO		24-hr Minimum DO	
		Exceed.	Support	Exceed.	Support
AU_01	3	0	NA	0	NA
AU_02	21	9	NS	0	FS
AU_03	18	1	FS	1	FS
AU_04	No Data	—	—	—	—

NA – not assessed, NS – not supporting, FS – fully supporting

# Atascosa River – **HIGH** Aquatic Life Use

Source: TCEQ 2008 Assessment Data

AU	Number of Surveys	Fish		Benthics	
		Category	Support	Category	Support
AU_01	No Data	—	NA	—	NA
AU_02	5	<b>Inter-mediate</b>	<b>NS</b>	<b>Inter-mediate</b>	<b>NS</b>
AU_03	3	<b>Inter-mediate</b>	<b>NS</b>	<b>Limited</b>	<b>NS</b>
AU_04	No Data	—	NA	—	NA

NA – not assessed, NS – not supporting, FS – fully supporting

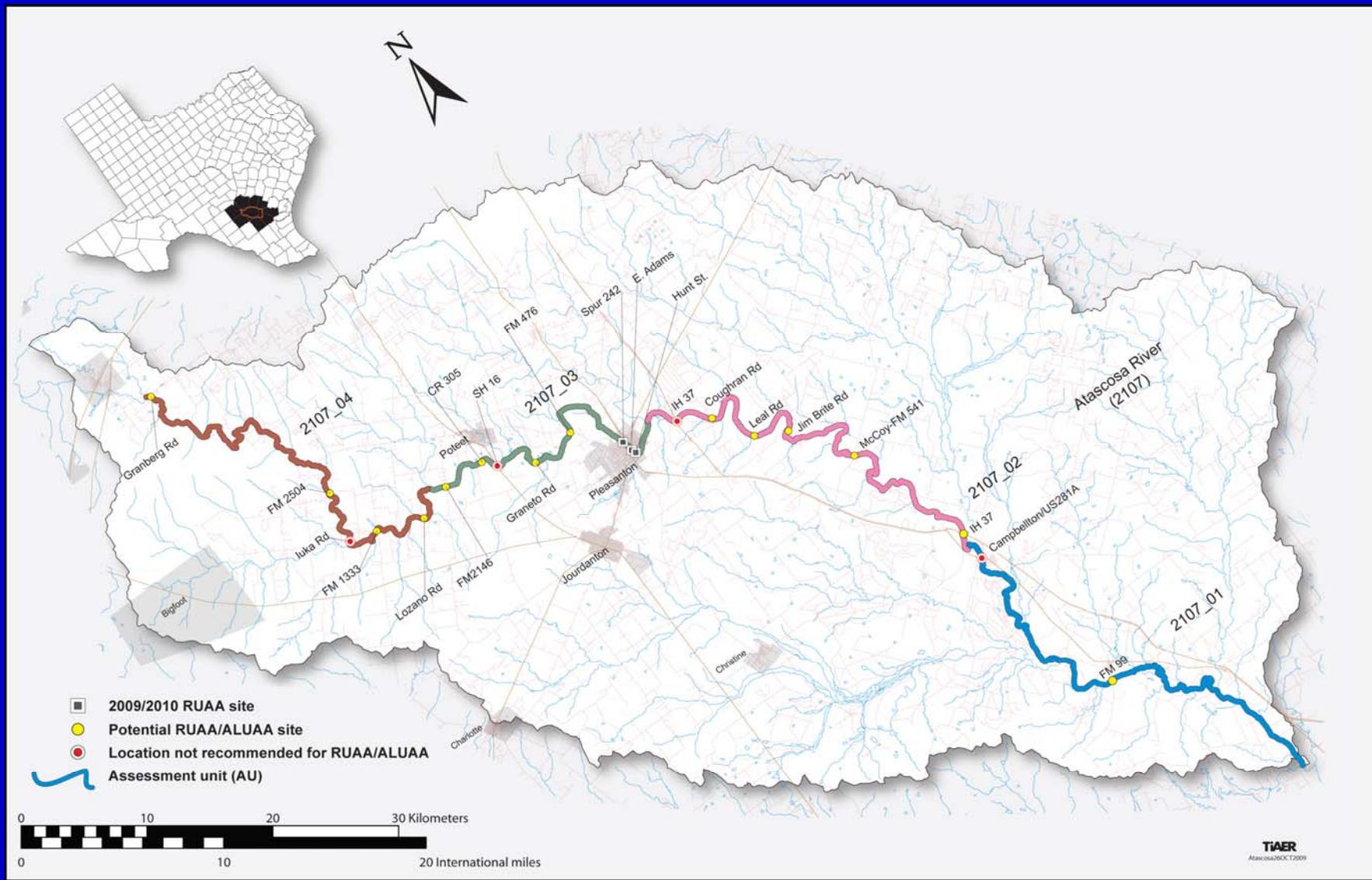
# Purpose & Components of Aquatic Life UAAs

# Purpose of Aquatic Life Use-Attainability Analysis Study

To determine if the current high aquatic life use is attainable for the Atascosa River.

Depending upon results, the aquatic life use standards and/or criteria may be modified for the Atascosa River.

# Potential Sampling Stations at Road Crossings in Atascosa River within each Assessment Unit



# Monitoring Work Effort

- Parameters: 10 24-hour dissolved oxygen measurements  
3 Fish surveys  
3 Benthic macroinvertebrate surveys  
3 Habitat Assessments
- Stations: To Be Determined (approximately 8)
- Period: Index period = March 15 through October 15  
Critical period = July 1 through September 30
- Duration: Two years (2010 & 2011)

# Atascosa River Crossings

Examples of Potential Sampling Stations  
for Aquatic Life UAA

(All photographs taken during the reconnaissance  
trip of June 9-10, 2009 unless noted otherwise)

**Atascosa River at FM 99 looking  
upstream under bridge**  
(previously sampled by TIAER)



**Atascosa River at Leal Rd looking upstream**  
(Previously sampled 2002 – 2004 by ECC)



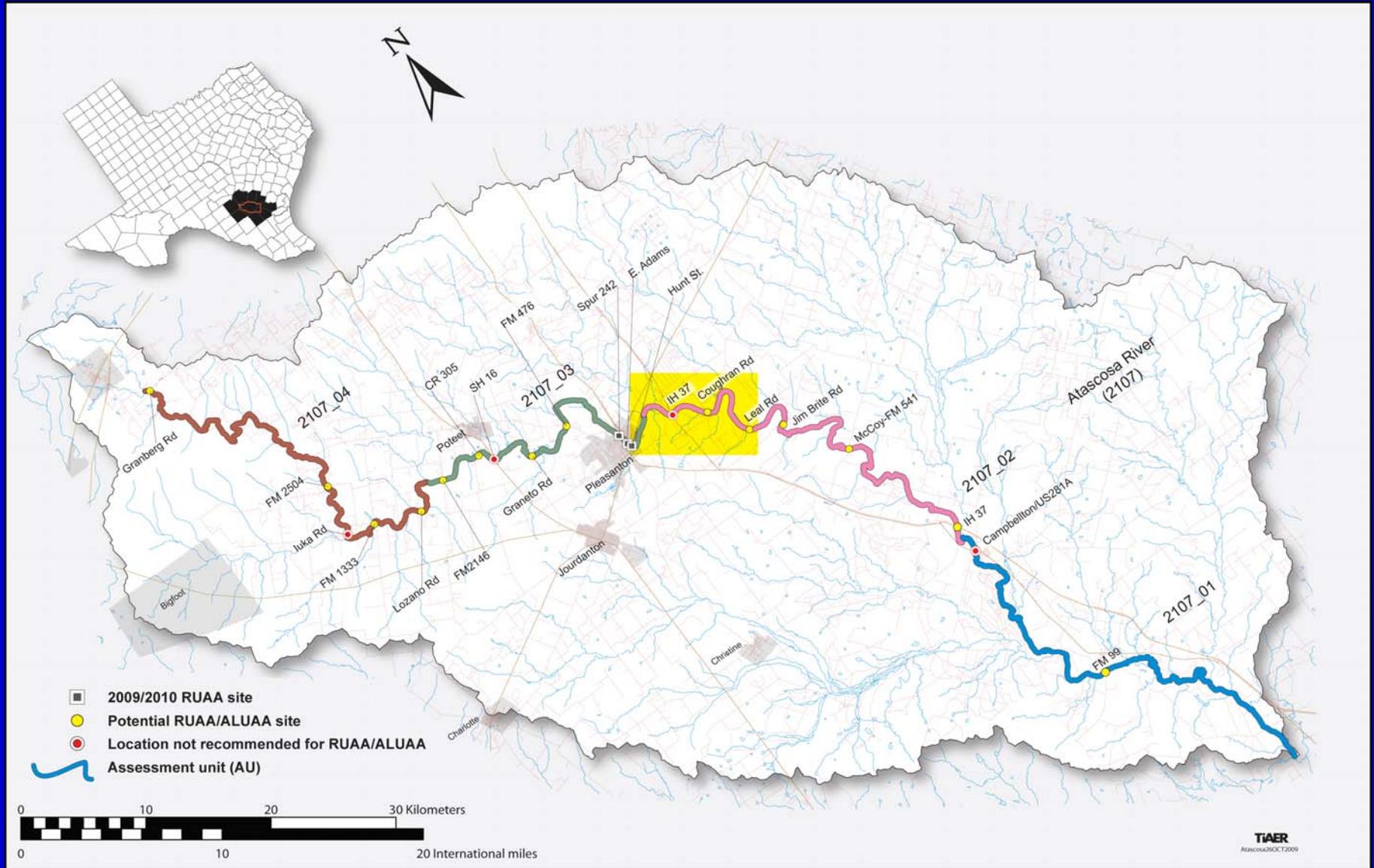
**Atascosa River at Coughran Rd**  
**Looking upstream under bridge**  
(previously sampled by TIAER)



# Atascosa River at Hunt St looking downstream (previously sampled by TIAER)



# Historical Study Area for Biological Surveys



# Needed from Cooperating Landowners

- Information on representative areas in each AU at which a biological survey may be appropriate
- Access to private lands both adjacent to road crossings and within properties for reconnaissance and ultimately a UAA effort
- Commitment to allow 10 visits over 2 years for completion of the UAA

# Future Work

- Determine sampling station locations
- Approval of Monitoring Plan & QAPP
- Complete monitoring efforts by Sept. 2011
- Write a technical report to support Use Attainability Analysis by TCEQ
- TCEQ to evaluate data

THANK YOU

Questions?