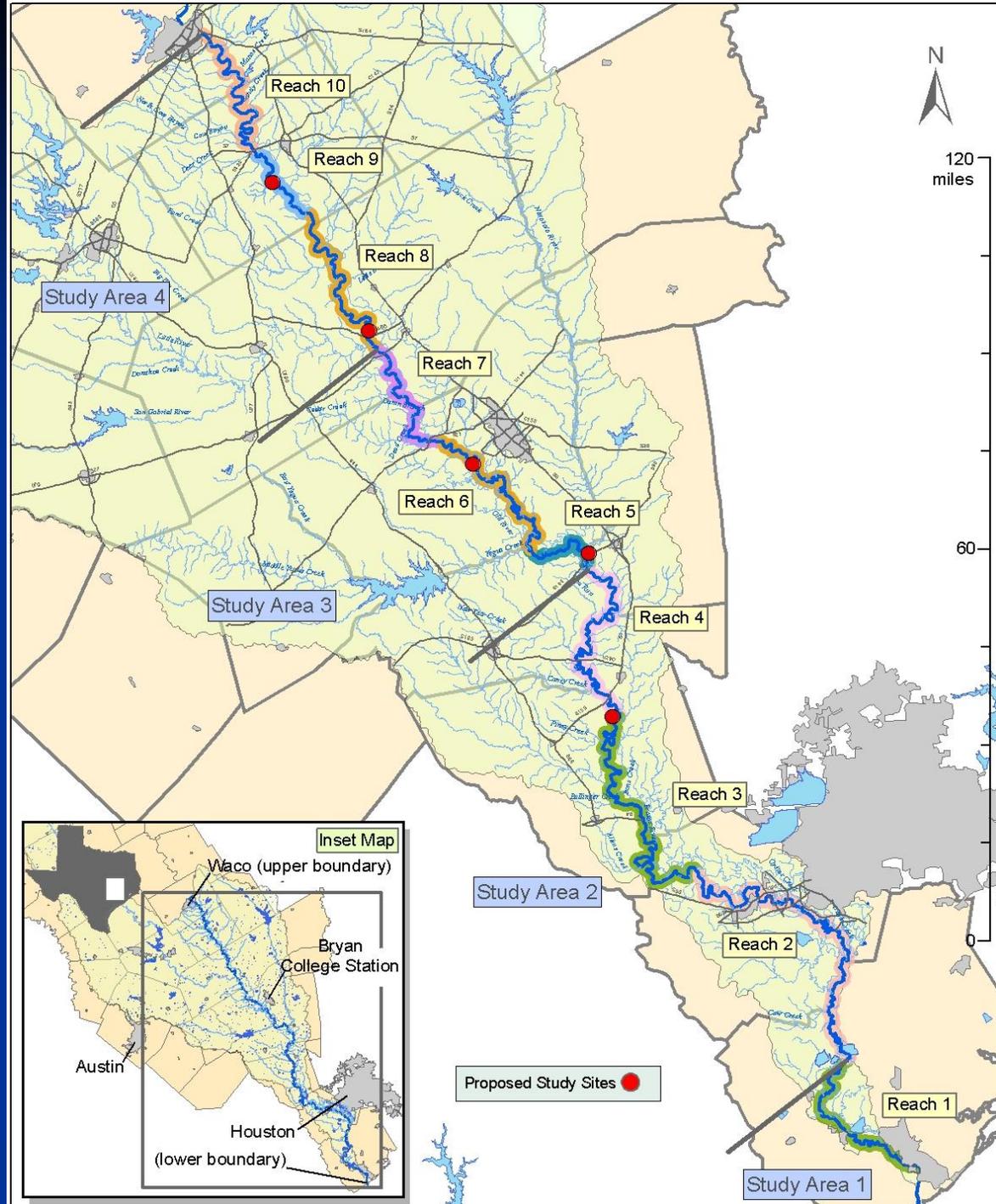


Study Areas, Reaches, and Sites



Study Areas and Reaches

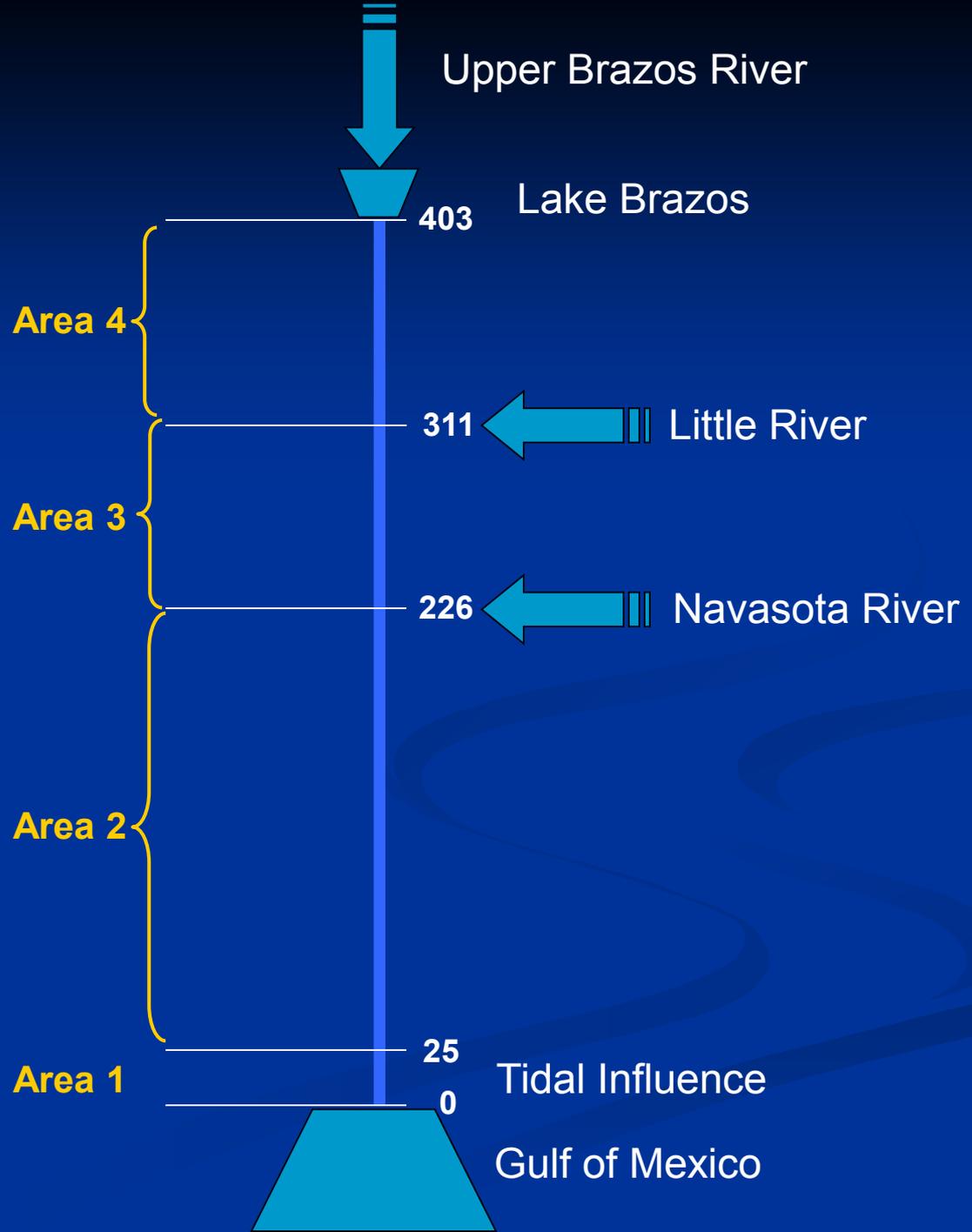
Proposed Study		River Mile [USGS]	Upstream Boundary Landmark	Floodplain /Channel Connectivity	Other Geomorphic Features	TCEQ Segment Number
Area	Reach					
4	10	364-403	Below Lake Brazos	Moderate	High Sinuosity	1242
	9	346-364	Highway 7		Low Sinuosity	
	8	311-346	Farm Road 413		"New" Channel	
3	7	284-311	Little River		Low	
	6	241-284	Little Brazos River			
	5	226-241	Yegua Creek			
2	4	176-226	Navasota River	High		1202
	3	110-176	Clear Creek			
	2	25-110	Oyster Creek			
1	1	0-25	SH 332		Tidal	1201

Middle and Lower Brazos River



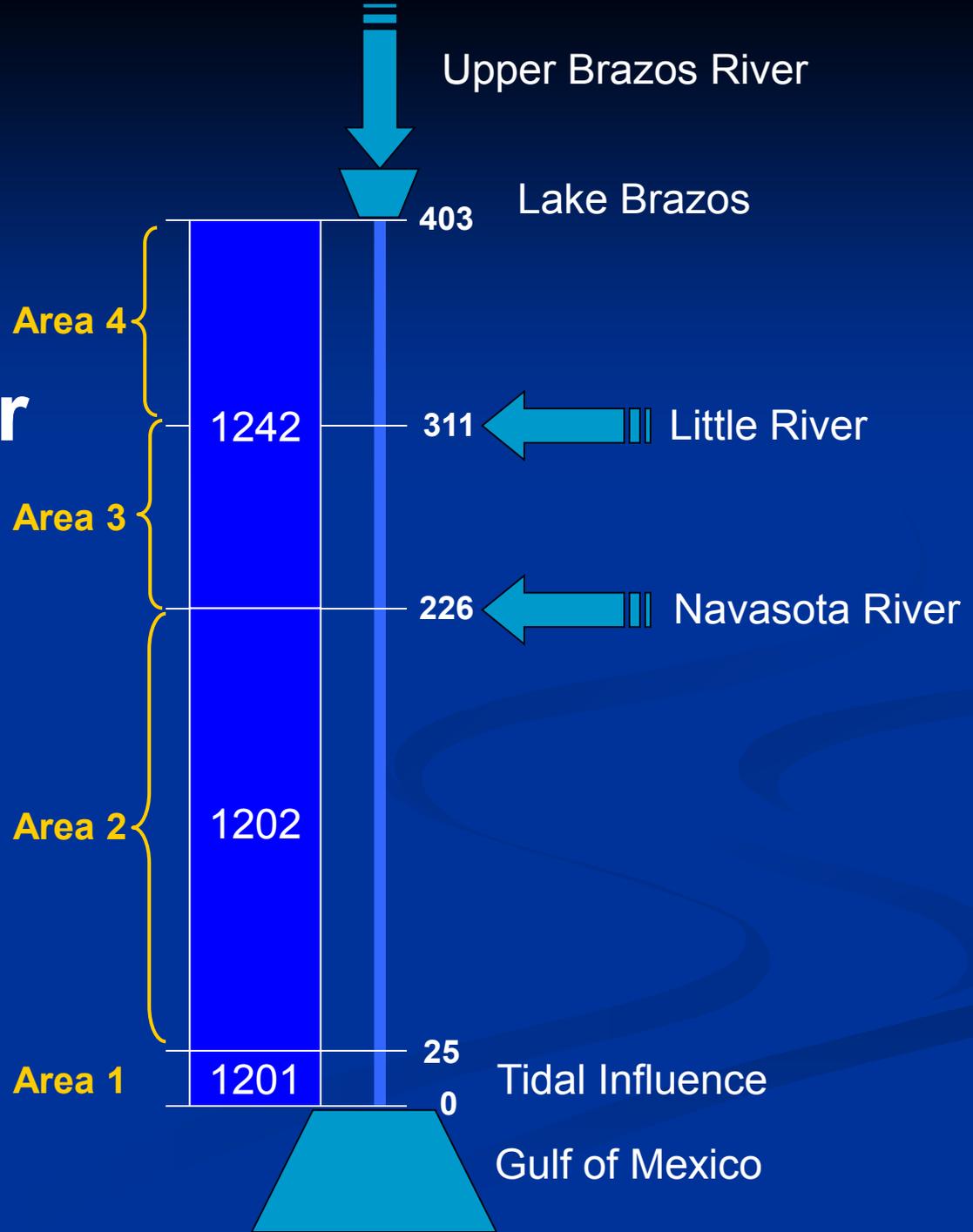
Study Areas

- Hydrology

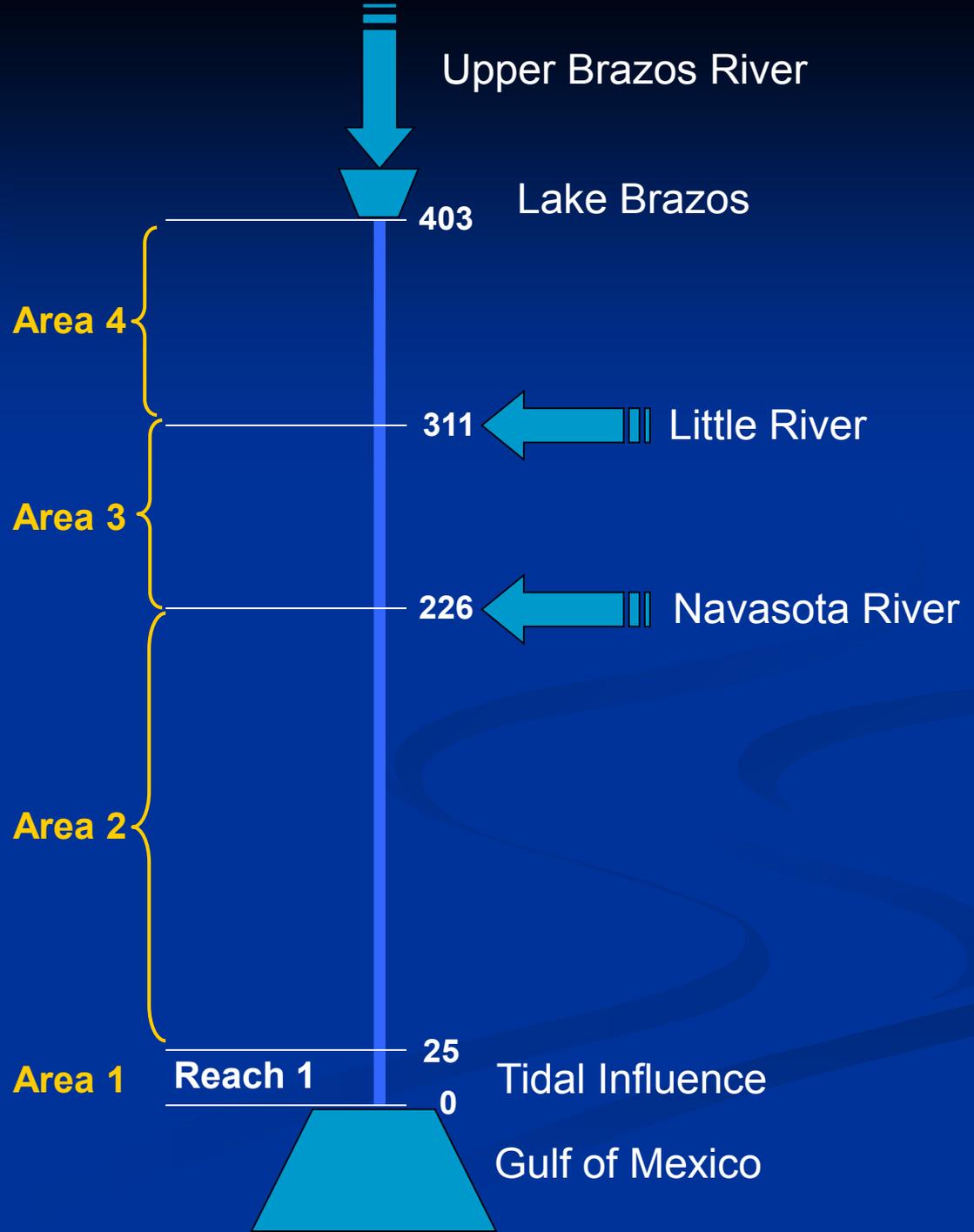


Study Areas

- TCEQ Water Quality Segments

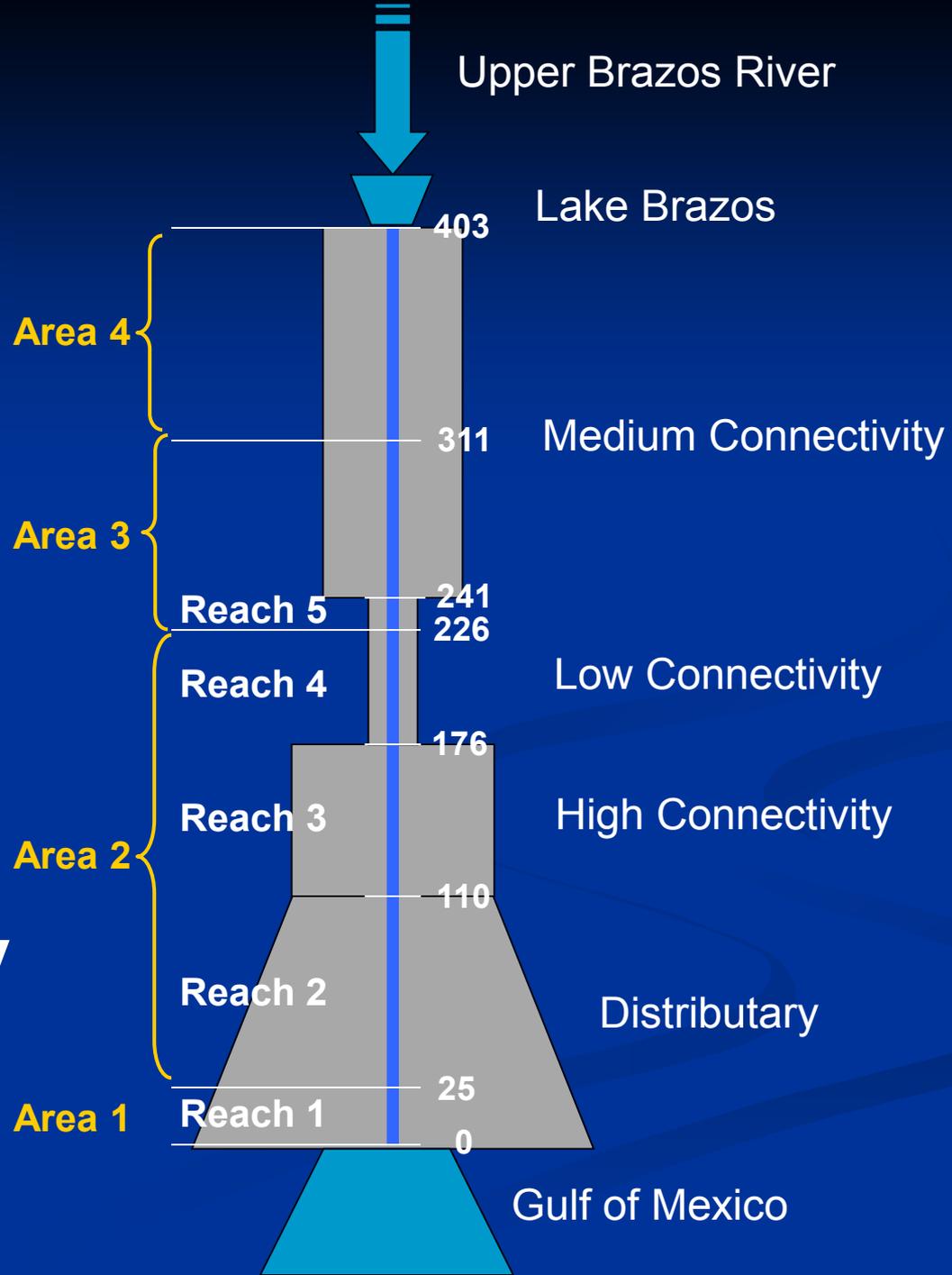


Study Reaches



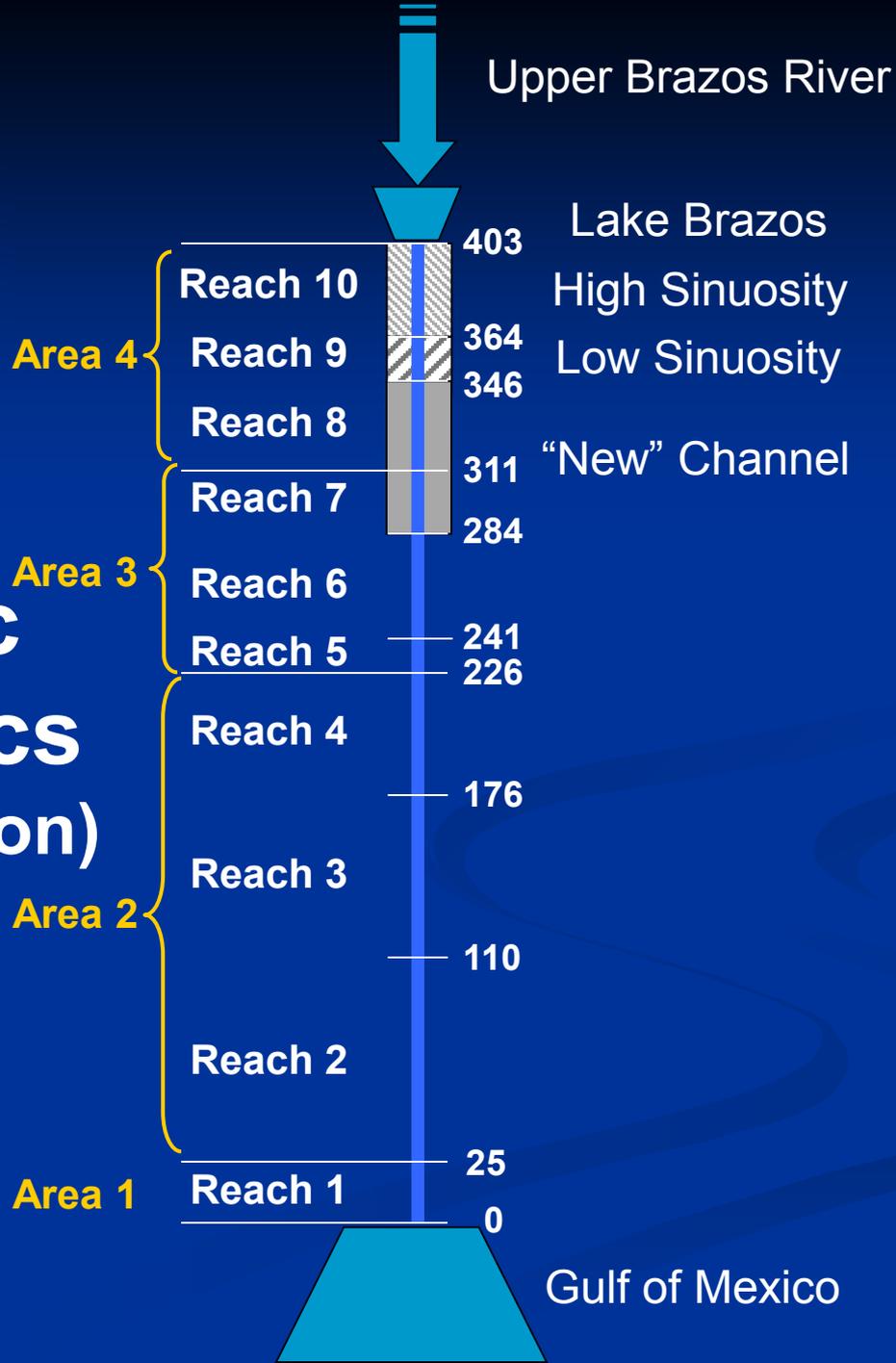
Study Reaches

- Channel / Floodplain Connectivity



Study Reaches

• Other Geomorphic Characteristics (Sinuosity, Avulsion)



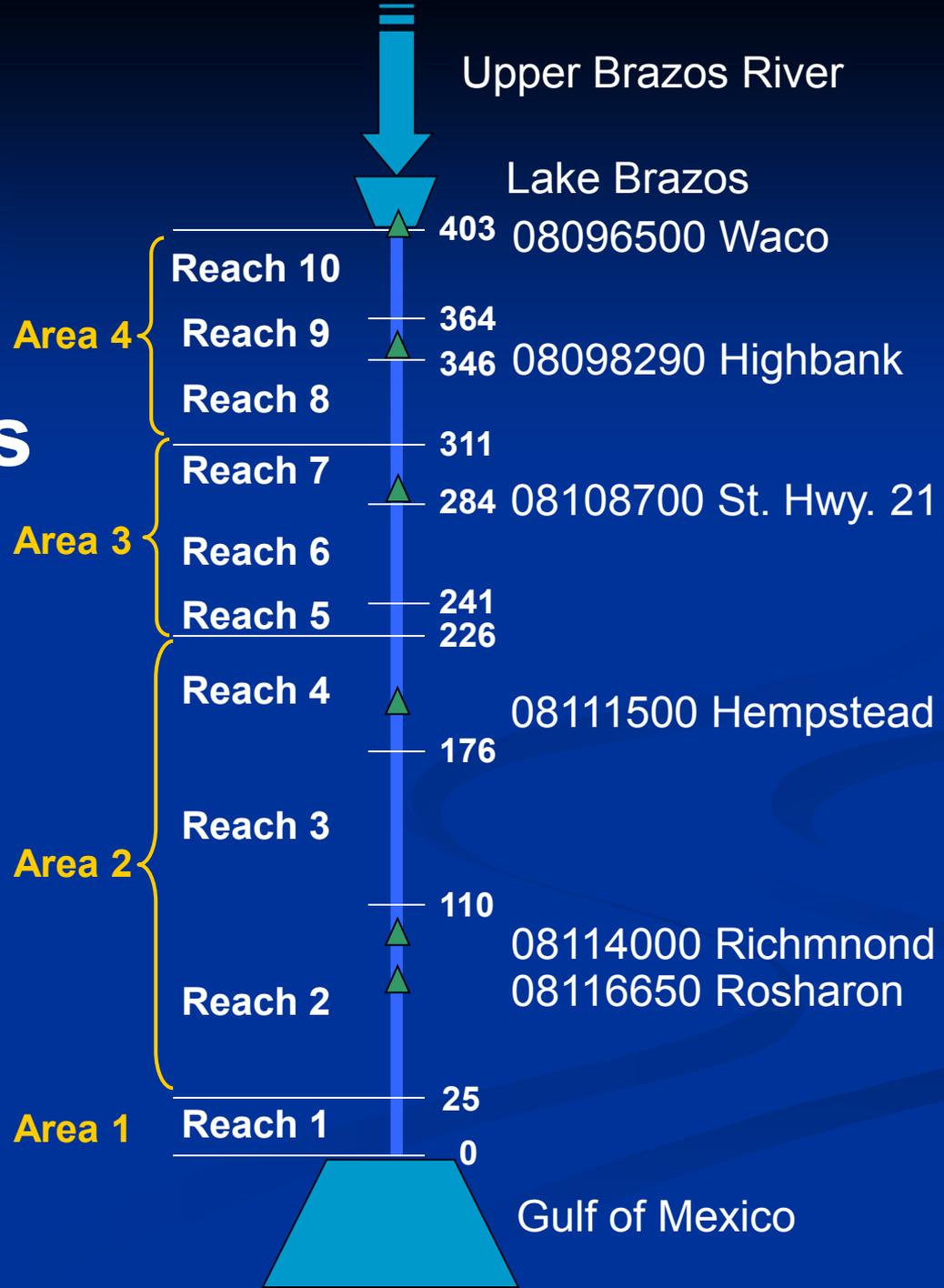
Study Reaches

- Landmarks



Study Reaches

- USGS Gages



Study Sites

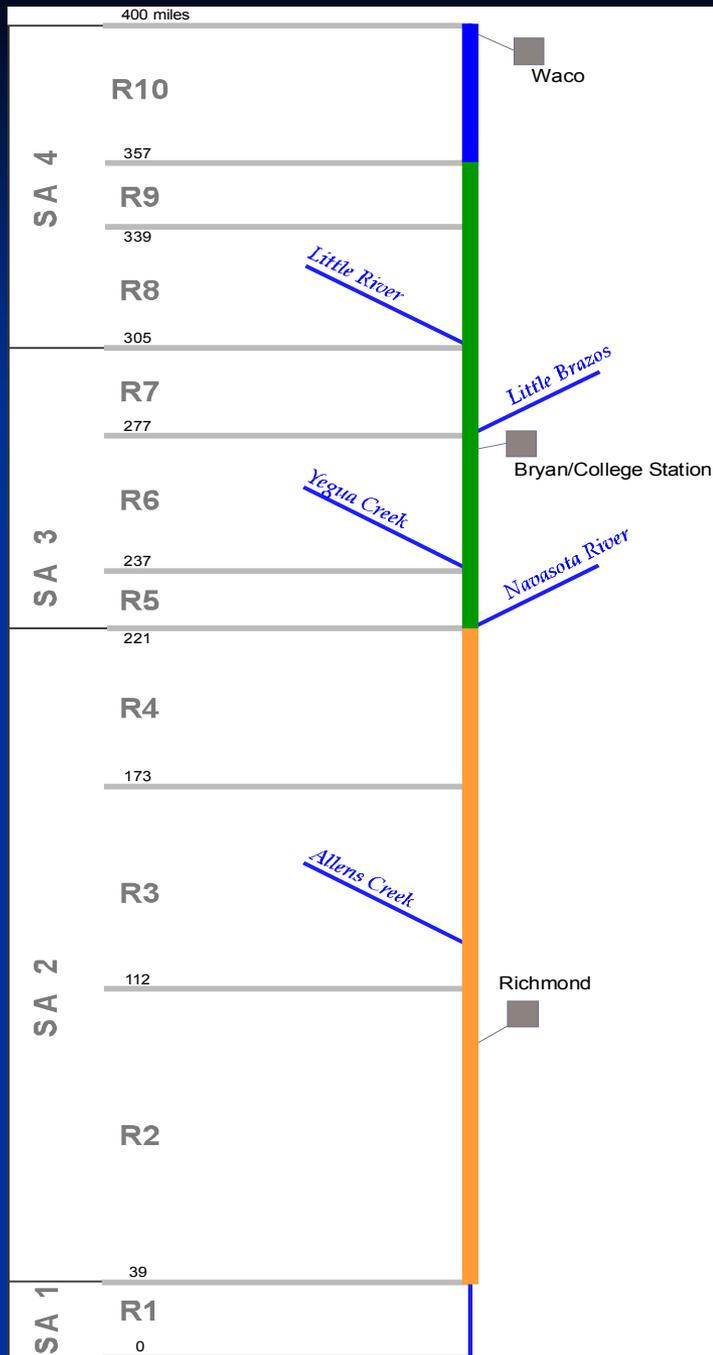


Study Site Selection

- Fish and Mussels
- Riparian Habitat

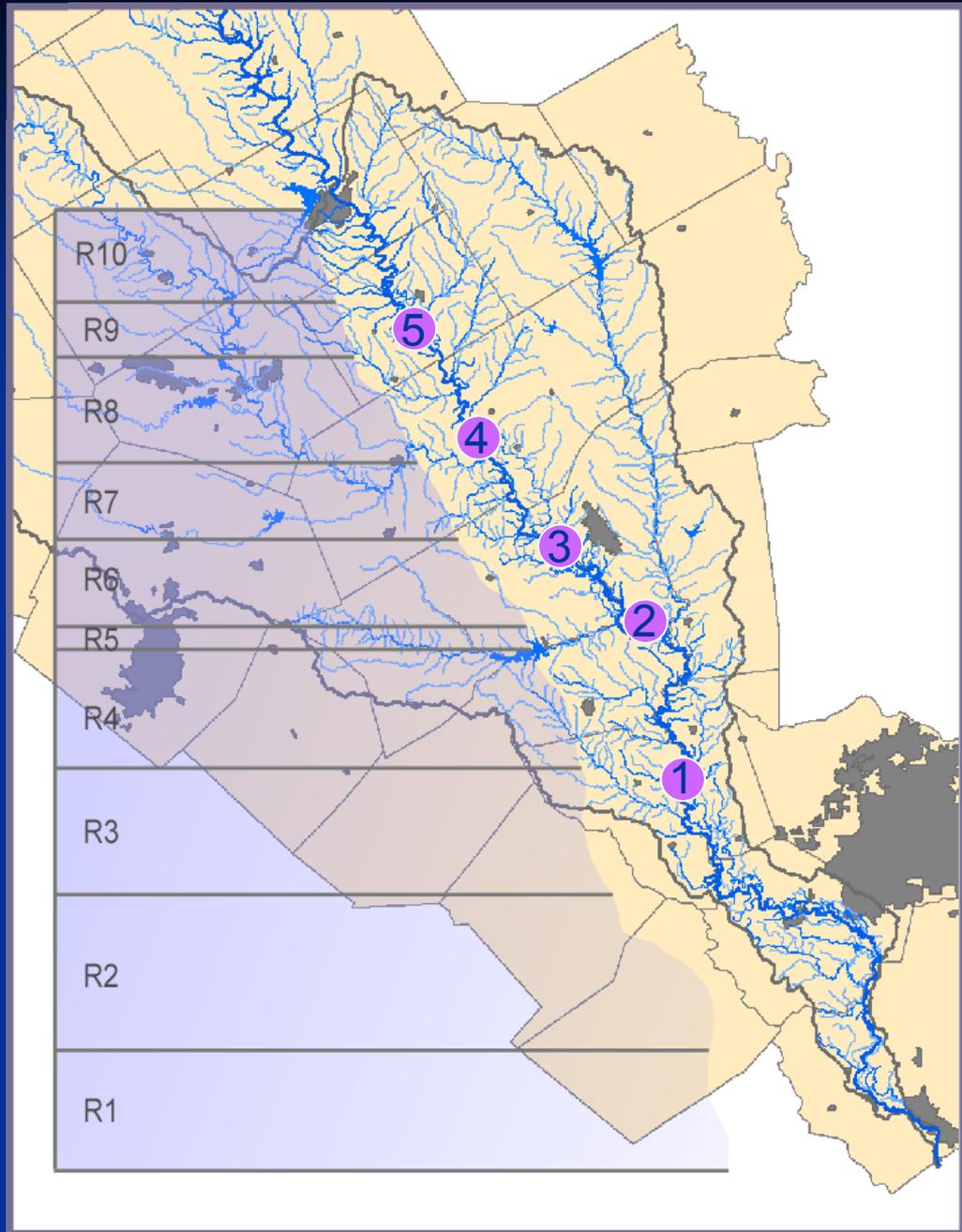
Mid-Lower Brazos River Fish Assemblage Pattern, 2000-2008

Source: TPWD/TIFP, Winemiller,
Bonner



Fish Points of Interest

1. Brazos River downstream of Hwy 159 (12020)
2. Brazos River upstream of Hwy 105 (12030)
3. Brazos River at Mussel Shoals (12050)
4. Brazos River at FM 485 (12080)
5. Brazos River downstream of Hwy 7 (12087)



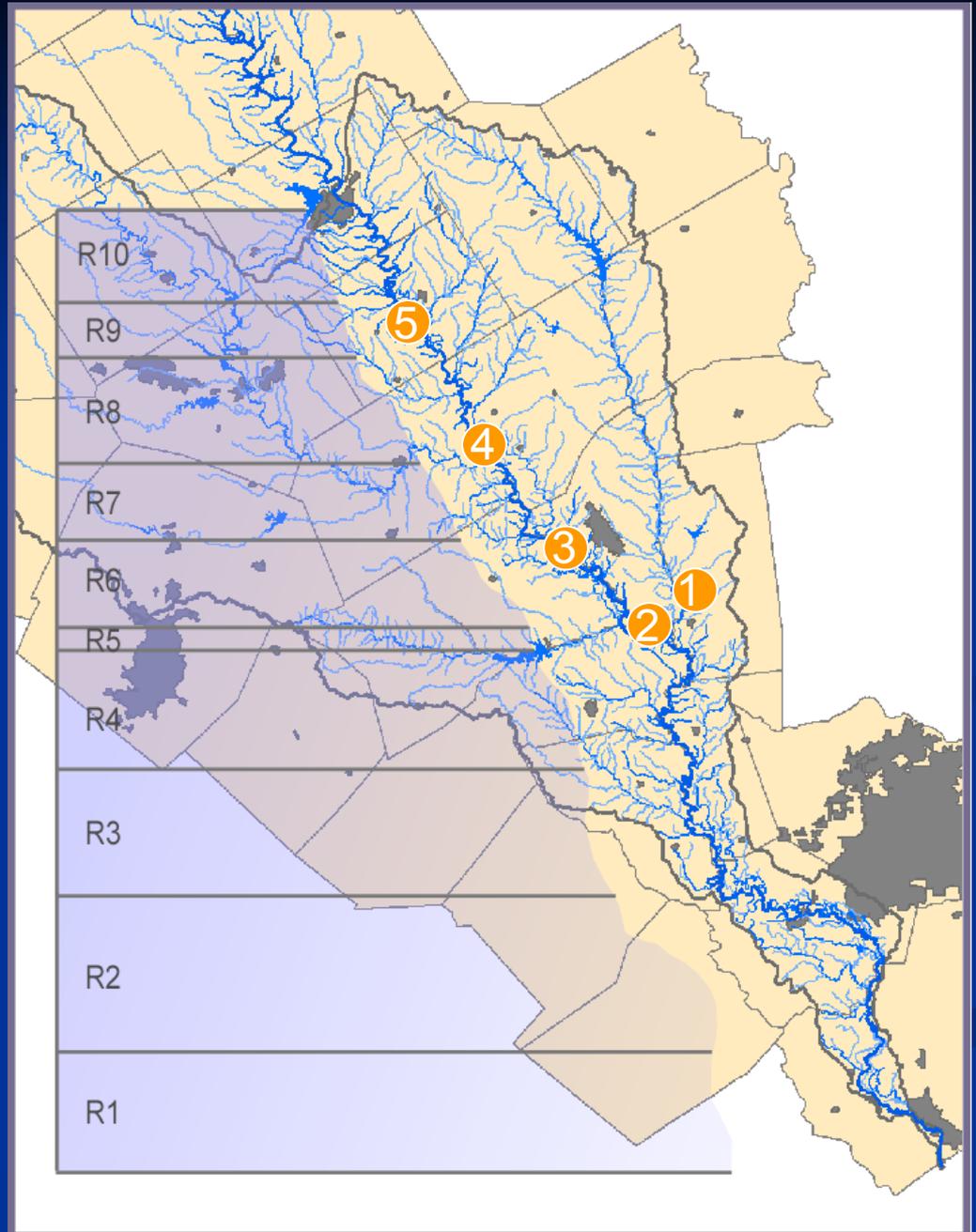
Mussel Points of Interest

Navasota River

1. Hwy 105

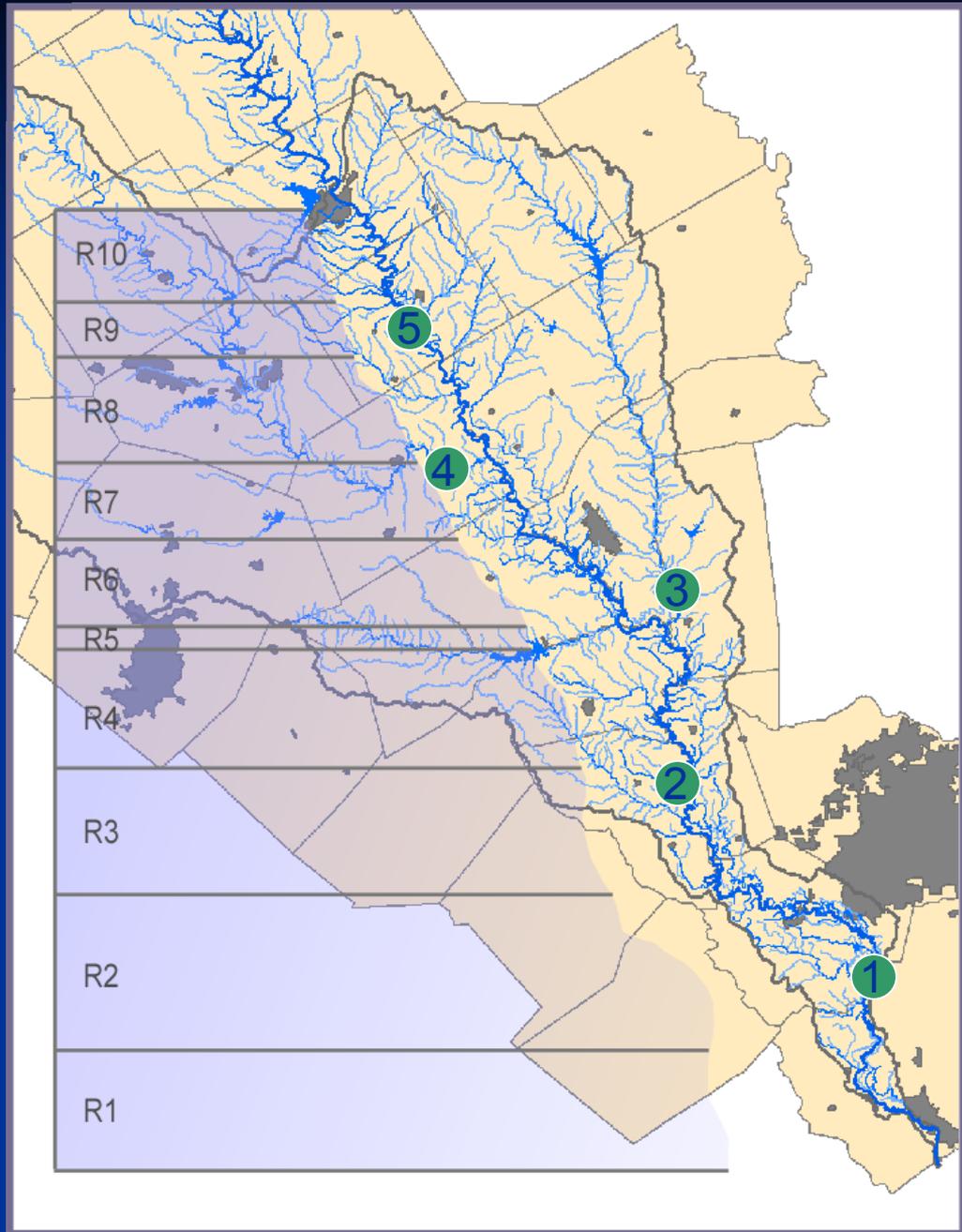
Brazos River

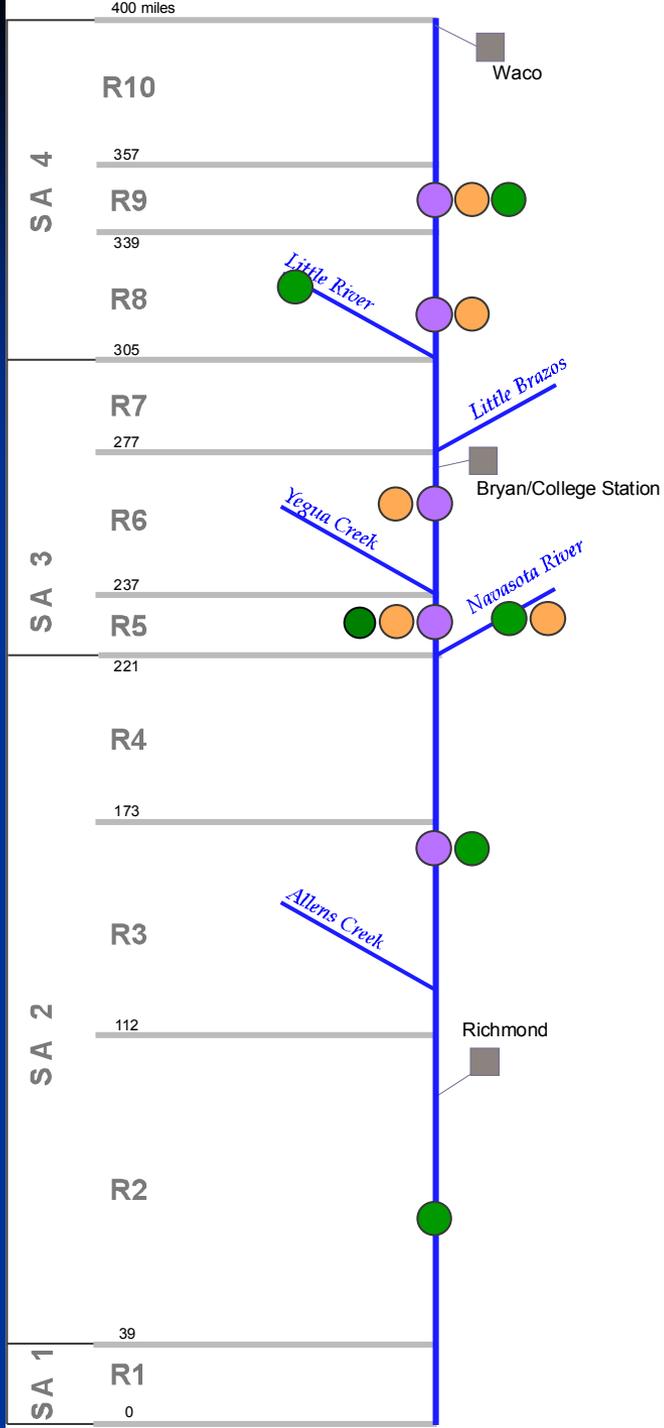
2. Hwy 105
3. Downstream of Hwy 21 at Mussel Shoals
4. FM 485
5. SH 7



Riparian Points of Interest

1. Brazos Bend State Park
2. Brazos River downstream of Hwy 159 – Wildcat Bend (12020)
3. Navasota River at Site 12040
4. Little River at Site 12070
5. Brazos River downstream of Hwy 7 (12087)





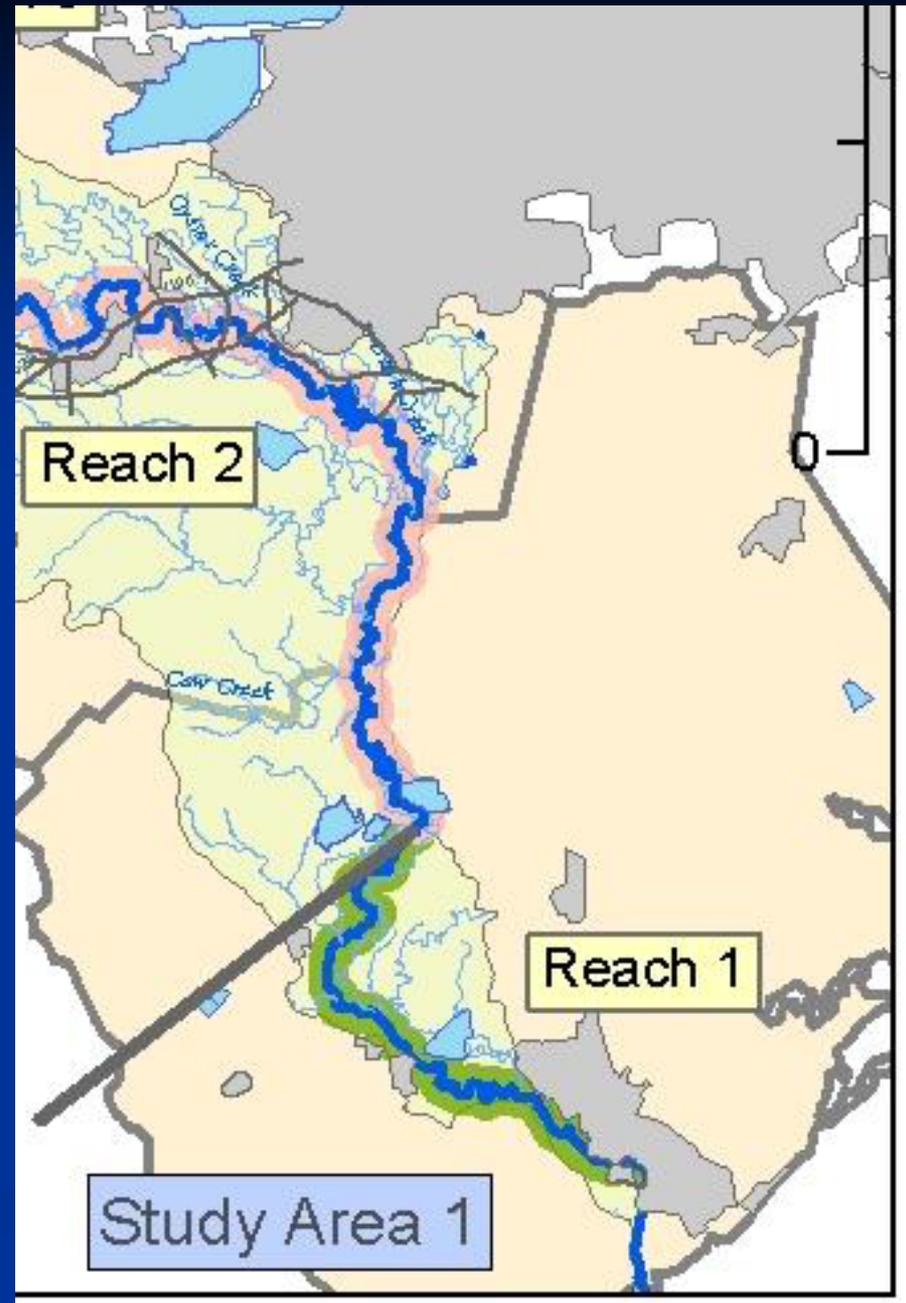
- Fish
- Mussels
- Riparian Habitat

Study Area 1

Reach 1

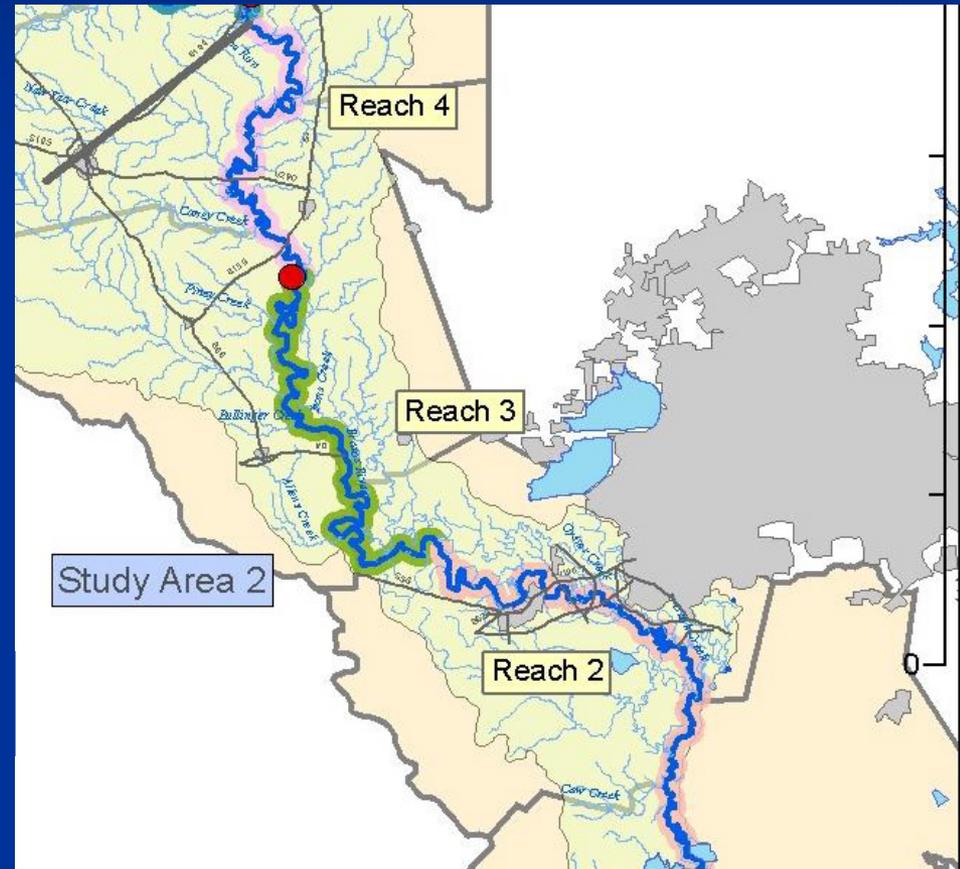
No study sites proposed at this time

- Highly modified channel limits ability to relate and manage flows to benefit riparian areas
- Tidal influence – adds to complexity of habitat modeling
- Estuarine influence – adds to biological complexity



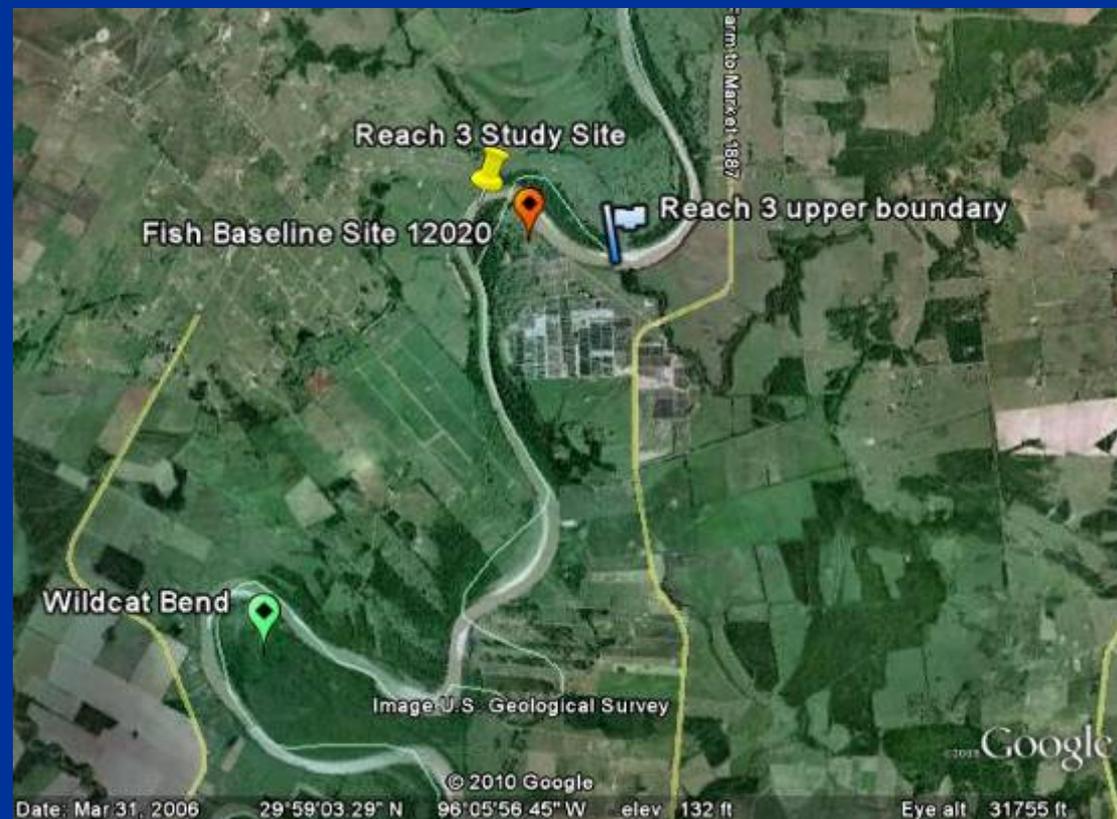
Study Area 2 - Reaches 2, 3 and 4

- No studies planned in Reach 2 or 4
- Reach 3 Study Site near RM 175
- Fish assemblages in Reach 3 similar to upstream and downstream reaches
- Potential oxbow formation at Wildcat Bend near RM 170 and fairly intact riparian area



Reach 3 Study Components

- Hydraulic and habitat modeling for fish and possibly mussels
- Baseline riparian assessment
- Associated instream flow sampling activities



Study Area 3 - Reaches 5, 6 and 7

Reach 5 Study Site

- Substantial data on fish and mussels
- Narrow corridor of riparian habitat
- Lateral connectivity with Navasota River

Reach 6 Study Site

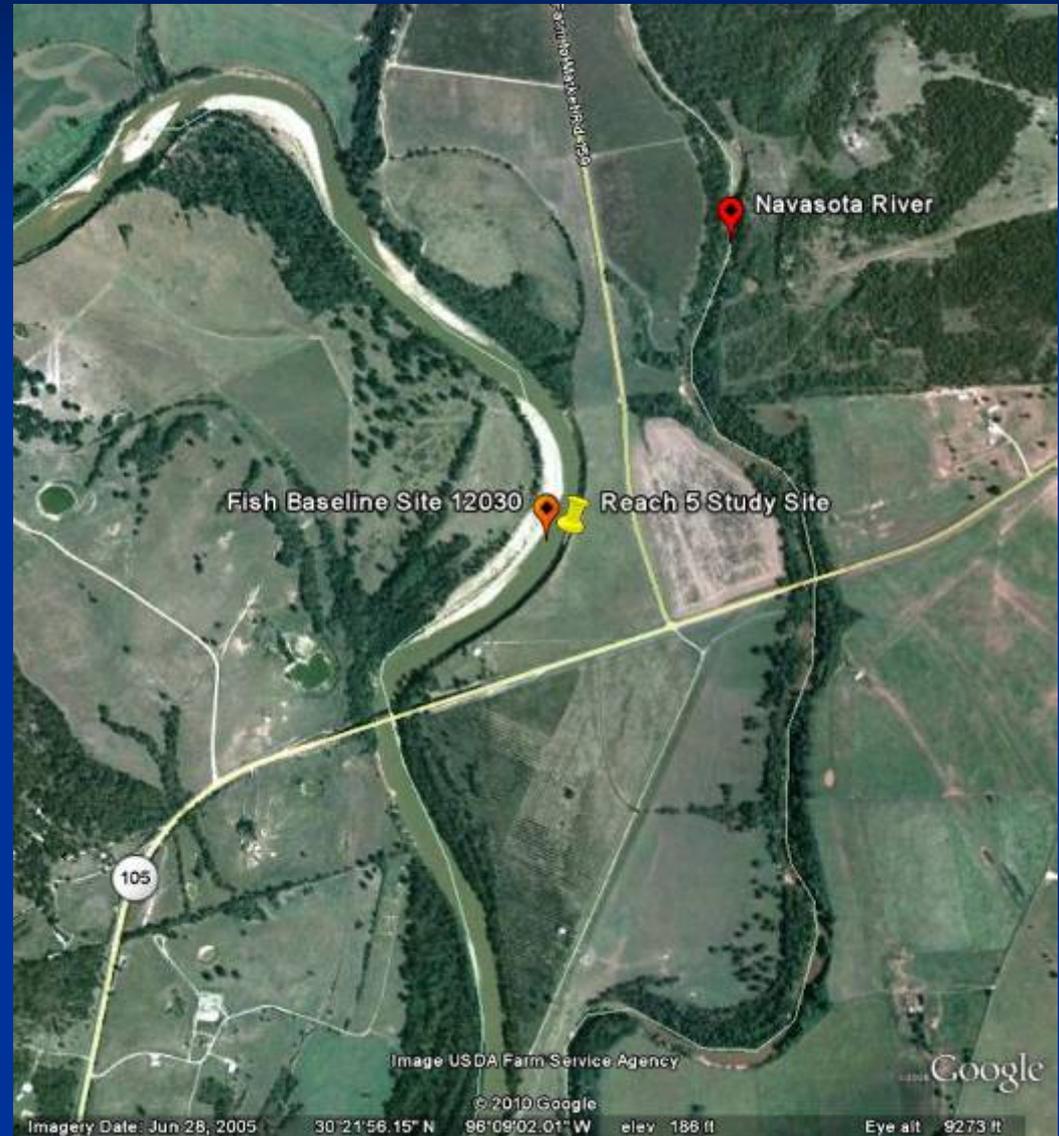
- Substantial data on fish and mussels
- Limited riparian habitat
- Large rocky shoals at Mussel Shoals (RM 275)

Reach 7 – no studies at this time



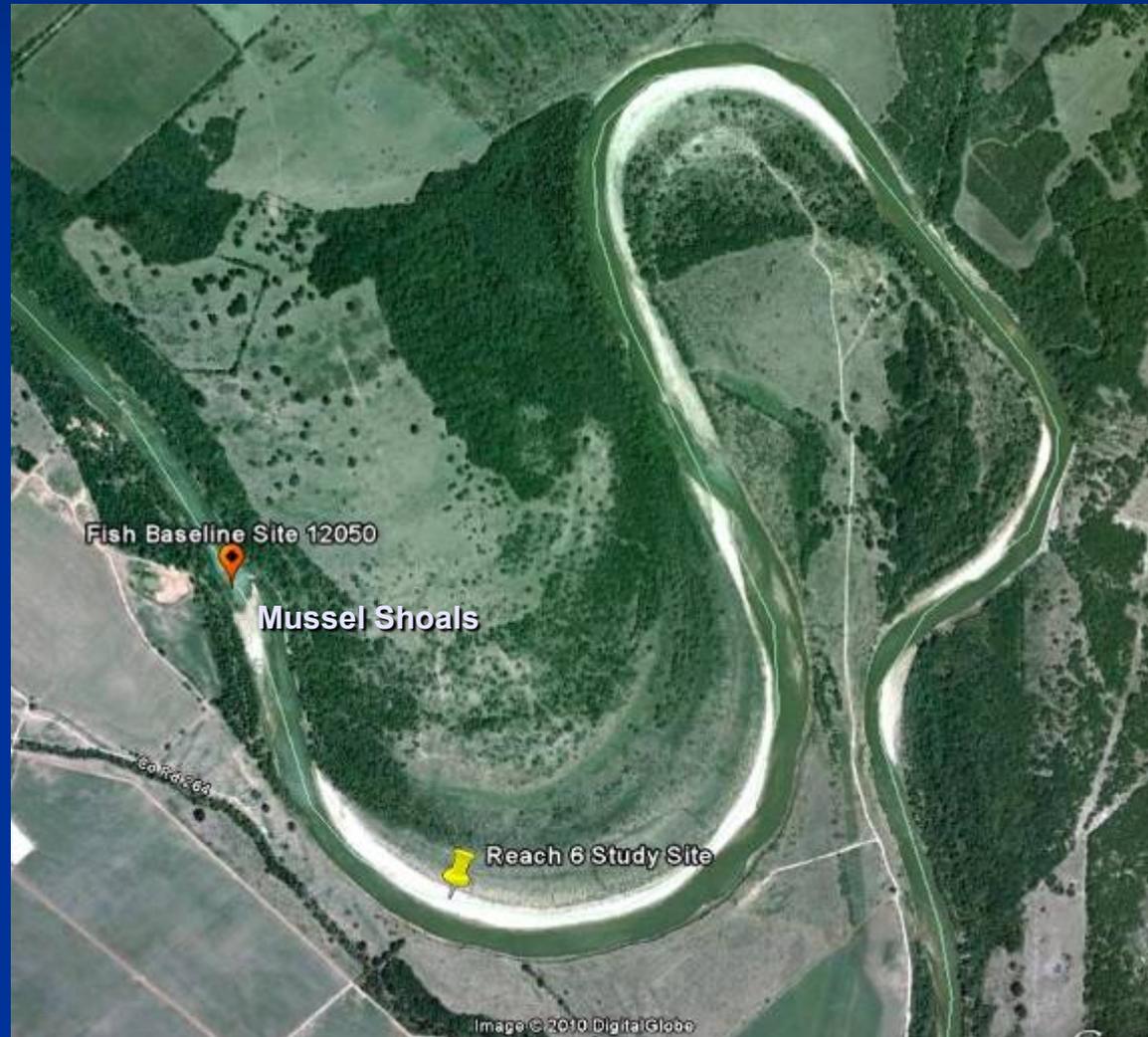
Reach 5 Study Components

- Hydraulic and habitat modeling for fish and mussels
- Baseline riparian assessment
- Associated instream flow sampling activities



Reach 6 Study Components

- Hydraulic and habitat modeling for fish and mussels
- Associated instream flow sampling activities



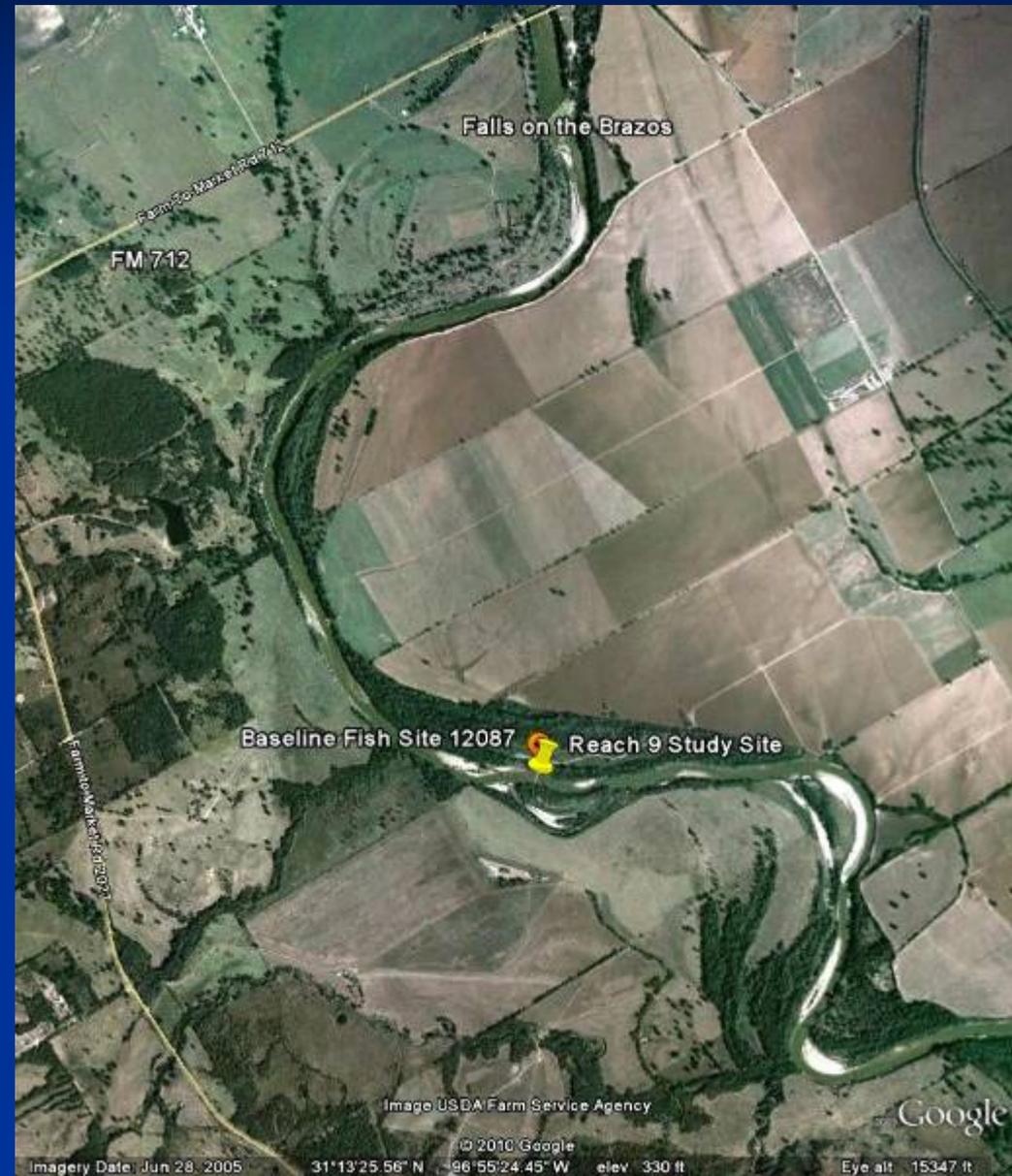
Reach 8 Study Components

- Hydraulic and habitat modeling for fish and possibly mussels
- Associated instream flow sampling activities



Reach 9 Study Components

- Hydraulic and habitat modeling for fish and mussels
- Baseline riparian assessment
- Associated instream flow sampling activities



Reach 9 Study Site

