

Field Data Sheets – Basic RUA Survey
(to be completed for each site)

Data Collectors & Contact Information:	<u>L. Beran, S. Painter, J. White, E. Williams</u>
Date & Time:	<u>5/19/11 1:30 pm</u> County Name: <u>Rockwall</u>
Stream Name:	<u>S. Fork Sabine River</u>
Segment No. or nearest downstream Segment No.:	
Description of Site:	<u>Sabine Creek Ranch SF 001</u>

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

 cfs Flow meter malfunction. SF 7/10/11

*USGS Gage Station 08017300
Max Flow - 2.8 cfs Mean - 2.4 cfs
Min Flow - 2.1 cfs*

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 23 °C 73° F Water Temp: 23.1 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<input type="checkbox"/> Forest	<input type="checkbox"/> Urban	<input type="checkbox"/> Rip rap
<input type="checkbox"/> Shrub dominated corridor	<u>L,R</u> <input type="checkbox"/> Pasture	<input type="checkbox"/> Concrete
<input type="checkbox"/> Herbaceous marsh	<input type="checkbox"/> Row crops	Other (specify): <u> </u>
<input type="checkbox"/> Mowed/maintained corridor	<input type="checkbox"/> Denuded/Eroded bank	

6. Ease of bank access to the water body. Easy Moderately easy Moderately difficult Difficult *SF 7/17/11*

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation).

Accessed Through Sabine Creek Ranch Property at low water crossing, steep banks

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 5/19/11

Site: Sabine Creek Ranch
Time: 1:30pm

B. Primary Contact Water Recreation Evaluation

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable 50 7/1/11

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

Steep banks

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 5/19/11

Site: Sabine Creek Ranch
Time: 1:30 pm

b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50

c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

mud/clay makes wading difficult

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

mud/clay makes wading difficult

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

Only accessible through Sabine Creek Ranch

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

u/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: Saline Creek Ranch
 Time: 1:30 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 68 Downstream 69 Left Bank 70 Right Bank 71 #80-83
 Photos #s (150 meters) Upstream 72 Downstream 73 Left Bank 74 Right Bank 75
 Photos #s (300 meters) Upstream 74 Downstream 77 Left Bank 78 Right Bank 79 Low water crossing

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	1.25 m
60 meters	1.03
90 meters	1.12
120 meters	1.00
150 meters	1.08
180 meters	1.08
210 meters	1.02
240 meters	0.90
270 meters	1.45
300 meters	1.50
Average	1.14 m

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: Sabine Creek Reach
 Time: 1:30

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	8 m
Width at narrowest point of the stream within 300 meter reach	6 m
Width at the widest point of the stream within 300 meter reach	10 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: Sabine Creek Ranch
 Time: 1:30 PM

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|---|---|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input checked="" type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|---|---|--|--|
| <input checked="" type="checkbox"/> Roads | <input checked="" type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input checked="" type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Saline
 Date: 5/19/11

Site: Saline Creek Ranch
 Time: 1:30

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

Tires, household garbage

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

n/a

Field Data Sheets – Basic RUA Survey

(to be completed for each site)

Data Collectors & Contact Information: <u>L. Becan, S. Painter, J. White, E. Williams</u>
Date & Time: <u>5/19/2011 12pm</u> County Name: <u>Rockwall</u>
Stream Name: <u>S. Fork Sabine</u>
Segment No. or nearest downstream Segment No.: <u>05079-04</u>
Description of Site: <u>Mike McKown Property SF002</u>

McKOWN SP 6/30/11

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

2.11 cfs 0.60 m³/s est. Flow meter malfunction
(estimated using a small ball, meter survey rod + stopwatch) USGS Gage 08017300
Mean = 2.4 cfs

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 23.3 °C (74°F) Water Temp: 23.1 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<input type="checkbox"/> Forest	<input type="checkbox"/> Urban	<input type="checkbox"/> Rip rap
<input type="checkbox"/> Shrub dominated corridor	<input checked="" type="checkbox"/> <u>L,R</u> Pasture	<input type="checkbox"/> Concrete
<input type="checkbox"/> Herbaceous marsh	<input type="checkbox"/> Row crops	Other (specify): _____
<input type="checkbox"/> Mowed/maintained corridor	<input type="checkbox"/> Denuded/Eroded bank	

6. Ease of bank access to the water body Easy Moderately easy Moderately difficult Difficult

SP 7/19/11

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Water body accessed through pasture land that end permission from landowner.

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 6/19/2011

Site: Mike McKowan
Time: 12 pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body:

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable SP 7/1/11

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation)

mud/clay makes wading difficult

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation)

Only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed. SP 7/1/11

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 5/19/2011

Site: Mike McKowan
Time: 12 pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

mud / clay makes wading difficult

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

mud / clay makes wading difficult

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: Mike McKowan
 Date: 6/19/2011 Time: 12 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 54 Downstream 55 Left Bank 56 Right Bank 57 #66, 67 - Touch
 Photos #s (150 meters) Upstream 58 Downstream 59 Left Bank 60 Right Bank 61
 Photos #s (300 meters) Upstream 62 Downstream 63 Left Bank 64 Right Bank 65

a) Substantial pools – Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg – Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.85</u>
60 meters	<u>0.90</u>
90 meters	<u>1.04</u>
120 meters	<u>1.50</u>
150 meters	<u>1.40</u>
180 meters	<u>1.00</u>
210 meters	<u>0.50</u>
240 meters	<u>1.10</u>
270 meters	<u>1.10</u>
300 meters	<u>0.85</u>
Average	<u>1.02 m</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: Mike McKeown
 Time: 12 pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4.7 m
Width at narrowest point of the stream within 300 meter reach	3.1 m
Width at the widest point of the stream within 300 meter reach	6.3 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: 3 Fork Soline Site: Mike McQueen
 Date: 5/19/11 Time: 12 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|---|---|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input checked="" type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input checked="" type="checkbox"/> Other: <u>Nearby retreat</u> |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | <u>(Soline Creek Ranch)</u> |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|---|---|---|--|
| <input checked="" type="checkbox"/> Roads | <input checked="" type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input checked="" type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input checked="" type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnants of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: Mike McKanan
 Time: 12 pm

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:
Household garbage, tire

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Flow Meter Malfunction

Field Data Sheet - Basic RUAA Survey
Stream Flow (Discharge) Measurement

Stream: South Fork Sabine Date: 5/19/11
 Site: Mike Makow Site Description: Above low water crossing
 Time Begin: 8:45 Time End: _____ Meter Type: _____
 Observers: Beran, Painter, Labate, Williams Stream Width*: 6.3 m Section Width (W): .63
 Observations: _____

Section Midpoint (ft) (m)	Section Depth (ft) (m) (cm) (D)	Observational Depth** (ft) (m)	Velocity (V)		Flow (Q) (m³/s) (ft³/s) Q = (W)(D)(V)
			At Point (ft/s)(m/s)	Average (ft/s)(m/s)	
0.3					
0.6 0.9					
0.9 1.5					
1.2 2.1					
1.5 2.7					
1.8 3.3					
2.1 3.9					
2.4 4.5					
2.8 5.1					
3.0 5.7					
3.3 6.3					
3.6					
3.9					
4.2					
4.5					
4.8					
5.1					
5.4					
5.7					
6.0					
6.3					

50
7/1/11

Flow estimate d/s of low water crossing
 5 M stretch, small, plants, bull

Trial 1: 9.3 sec
 Trial 2: 9.5 sec
 Trial 3: 9.7 sec

Aug Depth: .1, .15, .1 = 0.35 m

Width: 2.7 m
 Area = ~~0.324~~ 0.315 m²

Aug. velocity = ~~0.5~~ 0.62 m/s
 1.9 m/sec

Est. Flow = ~~0.62~~ 3.08 m³/s

0.5985
1 CMS

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter
Date & Time:	6/27/2010 @ 11:00am County Name: Hunt Co.
Stream Name:	South Fork Sabine
Segment No. or nearest downstream Segment No.:	05076-04
Description of Site:	Site #18 - SH 276

At any point during the Basic RUAA Survey it becomes apparent that primary contact recreation is clearly the use for the water body the investigator should stop conducting the UAA.

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 dry no flow low normal high - flooded

2. Check the following stream type that applies on the day of the survey:
 Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.

Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.

Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.

Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the stream flow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

~~0.0701 cms~~ ~~0.711 cfs~~ sp 2/9/11
 0.0361 cms 1.276 cfs

4. Water Quality Data (Field Parameters)

Air Temp 32.1 °C Water Temp 27.1 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<input type="checkbox"/> Forest	<input type="checkbox"/> Urban	<input type="checkbox"/> Rip rap
<input checked="" type="checkbox"/> Shrub dominated corridor	<input type="checkbox"/> Pasture	<input type="checkbox"/> Concrete
<input type="checkbox"/> Herbaceous marsh	<input type="checkbox"/> Row crops	Other (specify): _____
<input type="checkbox"/> Mowed/maintained corridor	<input type="checkbox"/> Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Accessible from SH 276 but has steep banks, some vegetation, on private property

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site?

Yes No No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children
- Wading-Adults
- Swimming
- Water skiing
- Diving
- Tubing
- Surfing
- Whitewater-kayaking, canoeing, rafting
- Other: _____
- frequent public swimming-created by publicly owned land / commercial operations

No primary contact activities that commonly occur were observed

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual far - between 8 and 30 meters (100 ft)
- Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

The depth is fairly low, narrow channel

3. Describe if there is public access (e.g. parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Accessibly off of SH 276; steep banks, some vegetation, on private property

4. Are areas with primary contact recreation activities/ bathing beach (e.g. state/local parks with swimming, etc.) located near (e.g. w/in 5 miles upstream and downstream) this site?

Yes No

C. Secondary Contact Water Recreation Evaluation:

- **Secondary contact recreation 1:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- **Secondary contact recreation 2:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

- 1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g. secondary contact recreation activities)?
 - Yes
 - No secondary

a. Type of secondary contact recreation activities observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

b. Individuals observed at the site. None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Secondary touch: fishing, pets and related contact with water In a boat touching water
- Body on shore near water within 8 meters (25ft) of water Body far away - 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

Fairly shallow depth, narrow channel

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently

Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason? physical characteristics of the water body limited public access
other _____

If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

Fairly shallow depth, narrow channel

6. Describe why there is limited public access (e.g. lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

Accessible off of SH 270; steep banks, some vegetation, private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

n/a

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Bearing 86° 30 M Photo's Upstream 81 Downstream 82 Left Bank 83 Right Bank 84
 Bearing 120° 150 M Photo's Upstream 85 Downstream 86 Left Bank 87 Right Bank 88
 Bearing 300° 300 M Photo's Upstream 89 Downstream 90 Left Bank 91 Right Bank 92

a) Substantial pools - Measure the length, width (@ widest point) and depth of each pool (if > 10 pools only measure 10 pools). A **substantial pool is >10 meters in length** for a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.20
60 meters	0.20
90 meters	sp 0.15 0.15
120 meters	0.20
150 meters	0.13
180 meters	0.32
210 meters	0.13
240 meters	0.20
270 meters	0.13
300 meters	0.21
Average	0.25

Field Data Sheets – Basic RUAA Survey

c) Stream width - Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4.5
Width at narrowest point of the stream within 300 meter reach	1.5
Width at the widest point of the stream within 300 meter reach	7

d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 COMMENTS:

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Bearing _____ 30 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

F. Stream Site Location Summary

1. Check the following activities observed over the site reach.

- Drinking or water in mouth
- Bathing
- Walking
- Jogging/running
- Bicycling
- Standing
- Sitting
- Lying down/sleeping
- Playing on shoreline
- Picnicking
- Motorcycle/ATV
- Hunting/Trapping
- Wildlife watching
- None
- Other: _____

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- Culverts
- Barbed wire
- Utility pipe
- Fences
- Dams
- Other (specify): _____
- Log jams
- Thick vegetation
- Rip rap
- Low bridges
- Water control structure
- None

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- Campgrounds
- Playgrounds
- Rural area
- Residential
- National forests
- Urban/suburban location
- Golf Course
- Sports Field
- Stairs/walkway
- Boating access (ramps)
- Beach
- Bridge crossing
- Commercial boating
- Trails/paths (hiking/biking)
- Paved parking lot
- Unimproved parking lot
- Roads (paved/unpaved)
- Populated area
- Docks or rafts
- Commercial outfitter
- Nearby school
- Power Line Corridor
- Parks (national/city/county/state)
- Public Property
- Other: _____
- None of the Above

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- Private Property
- No trespass sign
- Wildlife
- Steep slopes
- No public access
- No roads
- Fence
- Barge/ship traffic
- Industrial
- None of the Above
- Other: _____

Comments: *Ferret hog presence - tracks, bones*

6. Check any indications of human use (Attach photos).

- Roads
- Rope swings
- Dock/platform
- Foot paths/prints
- Other: _____
- RV/ATV Tracks
- Camping Sites
- Fire pit/ring
- Fishing Tackle
- NPDES Discharge
- Gates on corridor
- Children's toys
- Remnant's of Kid's play
- Organized event
- No Human Presence

Comments: _____

Field Data Sheets – Basic RUAA Survey

7. Check all water characteristics that apply (Attach photos)

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other
- Water Surface: clear scum foam debris oil

Other: Hajick mud/sludge on bottom for ~10m stretch D/S of bridge

8. Vertebrates Observed within 300 meter reach

- Snakes: None slight presence moderate presence large presence
- Water Dependent Birds: None slight presence moderate presence large presence
- Alligators: None slight presence moderate presence large presence

Comments: _____

9. Mammals Observed within 300 meter reach

- Wild: None slight presence moderate presence large presence
- Domesticated Pets: None slight presence moderate presence large presence
- Livestock: None slight presence moderate presence large presence
- Feral Hogs: None slight presence moderate presence large presence

Comments: Fat Feral hog tracks and bones

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel: None Rare Common Abundant
- Small garbage in the channel: None Rare Common Abundant
- Bank Garbage: None Rare Common Abundant

Briefly describe the kinds of garbage observed: tires, large fiberglass tube, some household garbage, old water heater

12. Is the site located in a wildlife preserve with large wildlife (i.e waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

50 7/11/11

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams
Date & Time:	5/23/10 3:30 pm County Name: Hunt
Stream Name:	South Fork Sabine
Segment No. or nearest downstream Segment No.:	0507G-03
Description of Site:	FM 1565 Site 17

At any point during the Basic RUAA Survey it becomes apparent that primary contact recreation is clearly the use for the water body the investigator should stop conducting the UAA.

32° 52' 59.8195
96' 12' 53.1145

A. Stream Characteristics:

1. Check the following channel flow status that applies.

- dry
- no flow
- low
- normal
- high
- flooded

2. Check the following stream type that applies on the day of the survey:

Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.

Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.

Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.

Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.

Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the stream flow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites. 0.12³⁶ cms 4.385 cfs SE 2/9/11

4. Water Quality Data (Field Parameters)

Air Temp 36.8 °C Water Temp 34.4 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

- | | | |
|--|--|-----------------------------------|
| <input checked="" type="checkbox"/> L + R Forest | <input type="checkbox"/> Urban | <input type="checkbox"/> Rip rap |
| <input type="checkbox"/> Shrub dominated corridor | <input type="checkbox"/> Pasture | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Herbaceous marsh | <input type="checkbox"/> Row crops | Other (specify): _____ |
| <input type="checkbox"/> Mowed/maintained corridor | <input type="checkbox"/> Denuded/Eroded bank | |

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Can park beside highway

8. Dominant Primary Substrate

- Cobble
- Sand
- Silt
- Mud/Clay
- Gravel
- Bedrock
- Rip rap
- Concrete

Field Data Sheets – Basic RUAA Survey

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site?

- Yes
- No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- | | | |
|--|--|---|
| <input type="checkbox"/> Wading-Children | <input type="checkbox"/> Tubing | <input checked="" type="checkbox"/> No primary contact activities that commonly occur were observed |
| <input type="checkbox"/> Wading-Adults | <input type="checkbox"/> Surfing | |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Whitewater-kayaking, canoeing, rafting | |
| <input type="checkbox"/> Water skiing | <input type="checkbox"/> Other: _____ | |
| <input type="checkbox"/> Diving | <input type="checkbox"/> frequent public swimming-created by publicly owned land / commercial operations | |

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual far - between 8 and 30 meters (100 ft)
- Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

Tree stumps, log jams

3. Describe if there is public access (e.g. parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Can park beside highway

4. Are areas with primary contact recreation activities/ bathing beach (e.g. state/local parks with swimming, etc.) located near (e.g. w/in 5 miles upstream and downstream) this site?

- Yes
- No

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

- 1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g. secondary contact recreation activities)?
 - Yes
 - No secondary

a. Type of secondary contact recreation activities observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

b. Individuals observed at the site. None 1-10 11-20 20-50 greater than 50

NA

c. Check ALL that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water In a boat touching water
 Body on shore near water within 8 meters (25ft) of water Body far away - 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
Steep overgrown banks

NA

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently

Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason? physical characteristics of the water body limited public access
 other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
Steep overgrown banks

6. Describe why there is limited public access (e.g. lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
Steep overgrown banks

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

n/a

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Bearing 280 30 M Photo's Upstream 104 Downstream 105 Left Bank 106 Right Bank 107
 Bearing 268 150 M Photo's Upstream 108 Downstream 109 Left Bank 116 Right Bank 111
 Bearing 280 300 M Photo's Upstream 112 Downstream 113 Left Bank 114 Right Bank 115

116-119
additional
documentation

a) Substantial pools - Measure the length, width (@ widest point) and depth of each pool (if > 10 pools only measure 10 pools). A substantial pool is >10 meters in length for a Basic RUA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5	N/A		
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	1.10
60 meters	1.26
90 meters	1.35
120 meters	1.55
150 meters	1.68
180 meters	1.83
210 meters	1.76
240 meters	1.65
270 meters	1.62
300 meters	1.84
Average	1.67

Field Data Sheets – Basic RUAA Survey

c) Stream width - Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5.0
Width at narrowest point of the stream within 300 meter reach	3.0
Width at the widest point of the stream within 300 meter reach	8.0

d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

COMMENTS:

~~2. Non-wadeable Streams~~

~~If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.~~

~~Bearing _____ 30 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____~~

NA

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

F. Stream Site Location Summary

1. Check the following activities observed over the site reach.

- Drinking or water in mouth
- Bathing
- Walking
- Jogging/running
- Bicycling
- Standing
- Sitting
- Lying down/sleeping
- Playing on shoreline
- Picnicking
- Motorcycle/ATV
- Hunting/Trapping
- Wildlife watching
- None
- Other: _____

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- Culverts
- Barbed wire
- Utility pipe
- Fences
- Log jams
- Thick vegetation
- Other (specify): _____
- Rip rap
- Low bridges
- Water control structure
- None

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

6/30/11
JEW

- Campgrounds
- Playgrounds
- Rural area
- Residential
- National forests
- Urban/suburban location
- Golf Course
- Sports Field
- Stairs/walkway
- Boating access (ramps)
- Beach
- Bridge crossing
- Commercial boating
- Trails/paths (hiking/biking)
- Paved parking lot
- Unimproved parking lot
- Roads (paved/unpaved)
- Populated area
- Docks or rafts
- Commercial outfitter
- Nearby school
- Power Line Corridor
- Parks (national/city/county/state)
- Public Property
- Other: _____
- None of the Above

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- Private Property
- No trespass sign
- Wildlife
- Steep slopes
- No public access
- No roads
- Fence
- Barge/ship traffic
- Industrial
- None of the Above
- Other: _____

Comments: _____

6. Check any indications of human use (Attach photos).

- Roads
- Rope swings
- Dock/platform
- Foot paths/prints
- Other: _____
- RV/ATV Tracks
- Camping Sites
- Fire pit/ring
- Fishing Tackle
- NPDES Discharge
- Gates on corridor
- Children's toys
- Remnant's of Kid's play
- Organized event
- No Human Presence

Comments: _____

Field Data Sheets – Basic RUAA Survey

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other
- Water Surface: clear scum foam debris oil
- Other:

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
- Water Dependent Birds None slight presence moderate presence large presence
- Alligators None slight presence moderate presence large presence

Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
- Domesticated Pets None slight presence moderate presence large presence
- Livestock None slight presence moderate presence large presence
- Feral Hogs None slight presence moderate presence large presence

Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
- Small garbage in the channel None Rare Common Abundant
- Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed: Household

12. Is the site located in a wildlife preserve with large wildlife (i.e waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

None

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

32° 53.482' N
96° 14.191' W

Data Collectors & Contact Information:	J. MOIR, S. PAINTER, J. WHITE, E. WILLIAMS		
Date & Time:	6-9-2011	11:20	County Name: HUNT
Stream Name:	SOUTH FORK SABINE		
Segment No. or nearest downstream Segment No.:	0507G-C3	SP	7/6/11
Description of Site:	KENNEDY PROPERTY - SF003		

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.77 cfs SP 7/6/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 29.4 °C Water Temp: 24.9 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Only accessible through private property, walked last 700 yards to site; steep, vegetated banks
SP 6/30/11

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine River
 Date: 6/4/11

Site: S.F. Sabine SFA03
 Time: 11:20 am

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable *SP 7/6/11*

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

Shallow depths, channel obstructions.

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

No public access. Only accessible through private property.

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed. *SP 7/6/11*

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUA Survey

Stream Name: S.F. Sabine

Site: SF003

Date: 6/4/11

Time: 11:20 am

- b. Check the number of individuals observed at the site.
 - None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 - Secondary touch: fishing, pets and related contact with water
 - In a boat touching water
 - Body on shore near water within 8 meters (25ft) of water
 - Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

steep vegetated banks, shallow depths with channel obstructions

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

shallow depths, steep vegetated banks, channel obstruction

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation)

heavily vegetated banks with access occurring only through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

None observed

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: SF003
 Date: 6/4/11 Time: 11:20 am

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

*2220°
1540°
1080°*

Photos #s (30 meters) Upstream 145 Downstream 146 Left Bank 147 Right Bank 148
 Photos #s (150 meters) Upstream 149 Downstream 150 Left Bank 151 Right Bank 152
 Photos #s (300 meters) Upstream 154 Downstream 155 Left Bank 156 Right Bank 157 #153 - bird pool drawings

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.60
60 meters	1.00
90 meters	0.95
120 meters	0.20
150 meters	0.50
180 meters	0.64
210 meters	0.64
240 meters	0.33
270 meters	0.40
300 meters	0.43
Average	0.57

SP 7/1/11

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: SFA03
 Date: 6/4/11 Time: 11:20 am

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4
Width at narrowest point of the stream within 300 meter reach	2
Width at the widest point of the stream within 300 meter reach	5

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No 5/4 7/1/11
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: SFO03
 Date: 6/4/11 Time: 11:20

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Seline Site: 5F003
 Date: 6/4/11 Time: 11:20

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: snake (1)

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

5 gallon buckets, tires, jugs

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

39° 32' 52.818" N
96° 13.409" W

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

Data Collectors & Contact Information:	J. Muir, S. Painter, J. White, E. Williams		
Date & Time:	6.4.2011 9:10	County Name:	Hunt
Stream Name:	SOUTH FORK SABINE		
Segment No. or nearest downstream Segment No.:	05076-03	SP	7/6/11
Description of Site:	Kennedy property - SF024		

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow
 Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.
1.95 cfs SP 7/6/11

4. Water Quality Data (Field Parameters)
 Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.
 Air Temp: 27.1 °C Water Temp: 24.6 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R,L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):
Only accessible through private property, walked last 1/2 mile to site, steep vegetated banks

8. Dominant Primary Substrate
 Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
Date: 6/4/11

Site: SF004
Time: 9:10

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

steep, vegetated banks, shallow depths, muddy stream bottom w/ logs, debris

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property, fence along bank

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFO04
Date: 6/4/11 Time: 9:15

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep, vegetated banks, shallow depth, muddy stream bottom w/ logs + debris
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep, vegetated banks, shallow depths, muddy stream bottom w/ logs, debris
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: 5F004
 Date: 6/4/11 Time: 9:10

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 125 Downstream 129 Left Bank 130 Right Bank 131 * Extra Photos
 Photos #s (150 meters) Upstream 137 Downstream 138 Left Bank 139 Right Bank 140 124-127
 Photos #s (300 meters) Upstream 141 Downstream 142 Left Bank 143 Right Bank 144 132-136

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1	4m	4m	0.6m
Pool 2	10m	8m	1.5m
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.45 0.65 pool 4/30/11
60 meters	0.57
90 meters	0.20
120 meters	0.10
150 meters	1.50
180 meters	0.90
210 meters	0.30
240 meters	0.32 0.32
270 meters	0.15
300 meters	0.30 0.30
Average	0.50m

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: 5F004
 Date: 6/4/11 Time: 9:10 am

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4m
Width at narrowest point of the stream within 300 meter reach	0.3m
Width at the widest point of the stream within 300 meter reach	7

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFO04
 Date: 12/4/11 Time: 1:12

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): <u>Log on bottom of channel</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S F Sabine Site: SFO04
 Date: 6/9/11 Time: 9:10

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: Snake observed

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

fires propane tank @ 300m
lumber

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams, Dean Dittus
Date & Time:	5/22/10 1:35 pm County Name: Hunt
Stream Name:	South Fork Sabine
Segment No. or nearest downstream Segment No.:	05076-02
Description of Site:	CR 2400 Site 15

At any point during the Basic RUAA Survey it becomes apparent that primary contact recreation is clearly the use for the water body the investigator should stop conducting the UAA.

32° 52' 50.8085
96° 10' 43.8904

A. Stream Characteristics:

1. Check the following channel flow status that applies.

- dry
- no flow
- low
- normal
- high
- flooded

2. Check the following stream type that applies on the day of the survey:

Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.

Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.

Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.

Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.

Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the stream flow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

0.1668 cms 5.68 cfs
0.1668 cms 5.89 cfs

4. Water Quality Data (Field Parameters)

Air Temp 36.5 °C Water Temp 33.9 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

- | | | |
|--|--|-----------------------------------|
| <input checked="" type="checkbox"/> Forest | <input type="checkbox"/> Urban | <input type="checkbox"/> Rip rap |
| <input type="checkbox"/> Shrub dominated corridor | <input type="checkbox"/> Pasture | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Herbaceous marsh | <input type="checkbox"/> Row crops | Other (specify): _____ |
| <input type="checkbox"/> Mowed/maintained corridor | <input type="checkbox"/> Denuded/Eroded bank | |

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

No parking. Dense vegetation except one location.
No trespassing signs

8. Dominant Primary Substrate

- Cobble
- Sand
- Silt
- Mud/Clay
- Gravel
- Bedrock
- Rip rap
- Concrete

Field Data Sheets – Basic RUAA Survey

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site?

- Yes
- No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- | | | |
|--|--|---|
| <input type="checkbox"/> Wading-Children | <input type="checkbox"/> Tubing | <input checked="" type="checkbox"/> No primary contact activities that commonly occur were observed |
| <input type="checkbox"/> Wading-Adults | <input type="checkbox"/> Surfing | |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Whitewater-kayaking, canoeing, rafting | |
| <input type="checkbox"/> Water skiing | <input type="checkbox"/> Other: _____ | |
| <input type="checkbox"/> Diving | <input type="checkbox"/> frequent public swimming-created by publicly owned land / commercial operations | |

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual far - between 8 and 30 meters (100 ft)
- Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

slipk steep banks, Dense vegetation

3. Describe if there is public access (e.g. parks, roads, etc.) (Attach photos, maps, etc. for documentation).

No parking

4. Are areas with primary contact recreation activities/ bathing beach (e.g. state/local parks with swimming, etc.) located near (e.g. w/in 5 miles upstream and downstream) this site?

- Yes
- No

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

- 1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g. secondary contact recreation activities)?
 - Yes
 - No secondary

a. Type of secondary contact recreation activities observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-white-water-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

b. Individuals observed at the site. None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Secondary touch: fishing, ~~pets~~ and related contact with water In a boat touching water
- Body on shore near water within 8 meters (25ft) of water Body far away - 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

Slick steep overgrown banks

3. ~~If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion?~~ frequently infrequently

Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason? physical characteristics of the water body limited public access other

If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

Slick steep overgrown banks

6. Describe why there is limited public access (e.g. lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation)

No parking No trespassing signs both sides of road.

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

Access only from bridge.

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

was only wadeable to 60 meters. per 4/30/11

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Bearing 276 30 M Photo's Upstream 86 Downstream 87 Left Bank 88 Right Bank 89
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

90-103 additional documentation

a) Substantial pools - Measure the length, width (@ widest point) and depth of each pool (if > 10 pools only measure 10 pools). A **substantial pool is >10 meters in length** for a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6	<i>N/A</i>		
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<i>0.72</i>
60 meters	<i>1.15</i>
90 meters	
120 meters	
150 meters	
180 meters	
210 meters	
240 meters	
270 meters	
300 meters	
Average	<i>0.94</i>

Too Deep

Field Data Sheets – Basic RUAA Survey

c) Stream width - Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	6.9
Width at narrowest point of the stream within 300 meter reach	4.0
Width at the widest point of the stream within 300 meter reach	8.0

d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 COMMENTS:

2. ~~Non-wadeable Streams~~

~~If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.~~

~~Bearing _____ 30 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____~~

NA

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

F. Stream Site Location Summary

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input checked="" type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | |
|--|---|
| <input checked="" type="checkbox"/> Private Property | <input type="checkbox"/> Fence |
| <input checked="" type="checkbox"/> No trespass sign | <input type="checkbox"/> Barge/ship traffic |
| <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> No public access | Other: _____ |
| <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|--|--|---|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input checked="" type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| Other: _____ | | | |

Comments: Fishing line tied to bridge guardrail

Field Data Sheets – Basic RUAA Survey

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other
- Water Surface: clear scum foam debris oil
- Other:

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
- Water Dependent Birds None slight presence moderate presence large presence
- Alligators None slight presence moderate presence large presence

Comments:

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
- Domesticated Pets None slight presence moderate presence large presence
- Livestock None slight presence moderate presence large presence
- Feral Hogs None slight presence moderate presence large presence

Comments:

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
- Small garbage in the channel None Rare Common Abundant
- Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed: Tires, iron, plastic, carpet

12. Is the site located in a wildlife preserve with large wildlife (i.e waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

None

Field Data Sheets – Basic RUAA Survey

(to be completed for each site)

Data Collectors & Contact Information: <u>L. Bern, S. Painter, J. White, E. Williams</u>	
Date & Time: <u>5/19/11</u> <u>11:30</u> <u>3:15 pm</u>	County Name: <u>Huht</u>
Stream Name: <u>S. Fork Sabine River</u>	
Segment No. or nearest downstream Segment No.: <u>05074-D2</u>	
Description of Site: <u>David Hartwig</u> <u>SF005</u> <u>5/19/11</u>	

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 - dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey.
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

 cfs Flow meter malfunction. SF 7/6/11 USGS Gage #08017300
Mean - 2.40 cfs

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 25.0 °C 77 °F Water Temp: °C not taken SF 7/6/11

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

JEW
6/30/11

<u>L</u> Forest	<u> </u> Urban	<u> </u> Rip rap
<u> </u> Shrub dominated corridor	<u> </u> Pasture	<u> </u> Concrete
<u> </u> Herbaceous marsh	<u> </u> Row crops	Other (specify): <u> </u>
<u> </u> Mowed/maintained corridor	<u> </u> Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Only accessible through private property, steep banks

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

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Stream Name: S. Fork Sabine
Date: 5/19/2011

Site: David Hacking
Time: 3:15 pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable *sp 7/6/11*

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

shallow depth, steep banks, log jams

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

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Stream Name: S. Fork Sabine River
Date: 5/19/11

Site: David Haarlwig
Time: 3:15pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50

- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep banks, vegetated banks

- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other SP 7/2/11
If other, list reasons: _____

- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep, vegetated banks

- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine River

Site: David Haartwig

Date: 5/19/11

Time: 3:15 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 87 Downstream 88 Left Bank 89 Right Bank 90

Photos #s (150 meters) Upstream 91 Downstream 92 Left Bank 93 Right Bank 94

Photos #s (300 meters) Upstream 95 Downstream 96 Left Bank 97 Right Bank 98

*extra photos:
#99-106
Trucks, log jams,
water holes, channels
obstructions*

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.48</u>
60 meters	<u>0.45</u>
90 meters	<u>0.53</u>
120 meters	<u>0.33</u>
150 meters	<u>0.41</u>
180 meters	<u>0.60</u>
210 meters	<u>0.70</u>
240 meters	<u>0.40</u>
270 meters	<u>0.57</u>
300 meters	<u>0.20</u>
Average	<u>0.467m</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine River
 Date: 5/19/11

Site: David Haartwig
 Time: 3:15 pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	2.5 m
Width at narrowest point of the stream within 300 meter reach	1 m
Width at the widest point of the stream within 300 meter reach	4 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: 5. Fork Sabine River
 Date: 3/19/11

Site: David Haarlowig
 Time: 3:15 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|--|---|--|--------------------------------------|--|
| <input checked="" type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine River
 Date: 5/19/11

Site: David Hartwig
 Time: 3:15pm

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed:

Tires + concrete post, household garbage

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

n/a

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B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site?

- Yes
- No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- | | | |
|--|--|---|
| <input type="checkbox"/> Wading-Children | <input type="checkbox"/> Tubing | <input checked="" type="checkbox"/> No primary contact activities that commonly occur were observed |
| <input type="checkbox"/> Wading-Adults | <input type="checkbox"/> Surfing | |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Whitewater-kayaking, canoeing, rafting | |
| <input type="checkbox"/> Water skiing | <input type="checkbox"/> Other: _____ | |
| <input type="checkbox"/> Diving | <input type="checkbox"/> frequent public swimming-created by publicly owned land / commercial operations | |

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual far - between 8 and 30 meters (100 ft)
- Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

None

3. Describe if there is public access (e.g. parks, roads, etc.) (Attach photos, maps, etc. for documentation).

No parking

4. Are areas with primary contact recreation activities/ bathing beach (e.g. state/local parks with swimming, etc.) located near (e.g. w/in 5 miles upstream and downstream) this site?

- Yes
- No

C. Secondary Contact Water Recreation Evaluation:

- **Secondary contact recreation 1:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- **Secondary contact recreation 2:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g. secondary contact recreation activities)?

- Yes
- No secondary

a. Type of secondary contact recreation activities observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

b. Individuals observed at the site.

- None
- 1-10
- 11-20
- 20-50
- greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Secondary touch: fishing, pets and related contact with water
- In a boat touching water
- Body on shore near water within 8 meters (25ft) of water
- Body far away - 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

Overgrown banks

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently

NA

Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason? physical characteristics of the water body limited public access other

If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

Overgrown banks

6. Describe why there is limited public access (e.g. lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

No parking

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

No evidence of recreation

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Bearing 266 30 M Photo's Upstream 65 Downstream 66 Left Bank 67 Right Bank 68
 Bearing 234 150 M Photo's Upstream 69 Downstream 70 Left Bank 71 Right Bank 72
 Bearing 236 300 M Photo's Upstream 73 Downstream 74 Left Bank 75 Right Bank 76

77-85 additional documentation

a) Substantial pools - Measure the length, width (@ widest point) and depth of each pool (if > 10 pools only measure 10 pools). A **substantial pool is >10 meters in length** for a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5		<i>n/a</i>	
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<i>.70</i>
60 meters	<i>.40</i>
90 meters	<i>.40</i>
120 meters	<i>.12</i>
150 meters	<i>.6</i>
180 meters	<i>.92</i>
210 meters	<i>.84</i>
240 meters	<i>.53</i>
270 meters	<i>.50</i>
300 meters	<i>.81</i>
Average	<i>.582</i>

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c) Stream width - Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5.0
Width at narrowest point of the stream within 300 meter reach	3.0
Width at the widest point of the stream within 300 meter reach	7.0

d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No *few 4/30/11*

COMMENTS: *There were no thalweg depths or pools $\geq 1.00m$.*

2. ~~Non-wadeable Streams~~

~~If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.~~

~~Bearing _____ 30 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____~~

NA

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

F. Stream Site Location Summary

1. Check the following activities observed over the site reach.

- Drinking or water in mouth
- Bathing
- Walking
- Jogging/running
- Bicycling
- Standing
- Sitting
- Lying down/sleeping
- Playing on shoreline
- Picnicking
- Motorcycle/ATV
- Hunting/Trapping
- Wildlife watching
- None
- Other: _____

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- Culverts
- Barbed wire
- Utility pipe
- Fences
- Dams
- Log jams
- Thick vegetation
- Other (specify): _____
- Rip rap
- Low bridges
- Water control structure
- None

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

new
4/20/11

- Campgrounds
- Rural area
- Residential
- National forests
- Urban/suburban location
- Golf Course
- Sports Field
- Stairs/walkway
- Boating access (ramps)
- Beach
- Bridge crossing
- Commercial boating
- Trails/paths (hiking/biking)
- Paved parking lot
- Unimproved parking lot
- Roads (paved/unpaved)
- Populated area
- Docks or rafts
- Commercial outfitter
- Nearby school
- Power Line Corridor
- Parks (national/city/county/state)
- Public Property
- Other: _____
- None of the Above

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- Private Property
- No trespass sign
- Wildlife
- Steep slopes
- No public access
- No roads
- Fence
- Barge/ship traffic
- Industrial
- None of the Above
- Other: _____

Comments: _____

6. Check any indications of human use (Attach photos).

- Roads
- Rope swings
- Dock/platform
- Foot paths/prints
- Other: _____
- RV/ATV Tracks
- Camping Sites
- Fire pit/ring
- Fishing Tackle
- NPDES Discharge
- Gates on corridor
- Children's toys
- Remnant's of Kid's play
- Organized event
- No Human Presence

Comments: _____

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7. Check all water characteristics that apply (Attach photos).

Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other:

8. Vertebrates Observed within 300 meter reach

Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments:

9. Mammals Observed within 300 meter reach

Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments:

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

Tracks Fecal droppings Bird nests

11. Garbage Observed

Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed: Bottles, plastic, tires

12. Is the site located in a wildlife preserve with large wildlife (i.e waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

None

Field Data Sheets – Basic RUA Survey

(to be completed for each site)

Data Collectors & Contact Information: <u>L. Beran, J. Painter, J. White, E. Williams</u>	
Date & Time: <u>5/19/11 4:40pm</u>	County Name: <u>Hunt</u>
Stream Name: <u>3 Fork Sabine</u>	
Segment No. or nearest downstream Segment No.: <u>05076-01</u>	
Description of Site: <u>Karl McKinney / Ted Lyons</u> <u>SFOOL</u> SP 4/30/11	

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 - dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

 cfs Flow meter malfunction SP 7/6/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 38.5 °C Water Temp: 21.1 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	Urban	Rip rap
Shrub dominated corridor	Pasture	Concrete
Herbaceous marsh	Row crops	Other (specify): _____
Mowed/maintained corridor	Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

only accessible through private property

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUA Survey

Stream Name: S. Fork Sabine
Date: 5/19/11

Site: McKinney Lyons
Time: 4:40pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50 50 7/1/11

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

n/a

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Only accessible through McKinney Lyons property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1. Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2. Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUA Survey

Stream Name: S. Fork Sabine
Date: 6/19/11

Site: McKinney / Lyons
Time: 4:40 pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
n/a
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
n/a
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
~~n/a~~
Property is a hunting lease with deer and duck blinds

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 5/19/11

Site: McKinney Lyons
 Time: 4:40pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 107 Downstream 108 Left Bank 109 Right Bank 110
 Photos #s (150 meters) Upstream 111 Downstream 112 Left Bank 113 Right Bank 114
 Photos #s (300 meters) Upstream 115 Downstream 116 Left Bank 117 Right Bank 118

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.55</u>
60 meters	<u>0.45</u>
90 meters	<u>0.40</u>
120 meters	<u>0.60</u>
150 meters	<u>0.44</u>
180 meters	<u>0.85</u>
210 meters	<u>0.65</u>
240 meters	<u>0.65</u>
270 meters	<u>0.63</u>
300 meters	<u>0.55</u>
Average	<u>0.58</u>

50
7/1/11

Field Data Sheets – Basic RUA A Survey

Stream Name: S. Fork Sabine Site: McKinney Heights
 Date: 5/19/11 Time: 4:40 pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach, (2) the width at the narrowest point of the stream within the 300 meter reach, and (3) the width at the widest point of the stream within the 300 meter reach

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5 m
Width at narrowest point of the stream within 300 meter reach	1 m
Width at the widest point of the stream within 300 meter reach	6.5 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No *yes 4/30/11*
 Comments: No depths were ≥ 1.00 m

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 6/19/11

Site: McKinney / Lyons
 Time: 4:40 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: This property is a game hunting ranch that has several duck ponds w/ several blinds located at x 60m from the creek.

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine

Site: McKinney Lyons

Date: 5/19/11

Time: 4:40 pm

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other wood
- Water Surface: clear scum foam debris oil
- Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
- Water Dependent Birds None slight presence moderate presence large presence
- Alligators None slight presence moderate presence large presence
- Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
- Domesticated Pets None slight presence moderate presence large presence
- Livestock None slight presence moderate presence large presence
- Feral Hogs None slight presence moderate presence large presence
- Comments: Feral Hogs and deer

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
- Small garbage in the channel None Rare Common Abundant
- Bank Garbage None Rare Common Abundant
- Briefly describe the kinds of garbage observed:

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams	Degan Dittus
Date & Time:	5/22/10	10:00 a.m.
County Name:	Hunt	
Stream Name:	South Fork Sabine	
Segment No. or nearest downstream Segment No.:	0507G-01	
Description of Site:	Hwy 34 Site 14	

st 2/9/11

At any point during the Basic RUAA Survey it becomes apparent that primary contact recreation is clearly the use for the water body the investigator should stop conducting the UAA.

32° 51' 40.5396
96° 08' 56.0287

A. Stream Characteristics:

1. Check the following channel flow status that applies.

- dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey:

Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.

Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.

Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.

Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.

Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the stream flow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites. N/A cms *Too deep to wade*

4. Water Quality Data (Field Parameters)

Air Temp ^{DO} 33.1 °C Water Temp 31.3 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

- | | | |
|--|--|-----------------------------------|
| <input checked="" type="checkbox"/> Forest | <input type="checkbox"/> Urban | <input type="checkbox"/> Rip rap |
| <input type="checkbox"/> Shrub dominated corridor | <input type="checkbox"/> Pasture | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Herbaceous marsh | <input type="checkbox"/> Row crops | Other (specify): _____ |
| <input type="checkbox"/> Mowed/maintained corridor | <input type="checkbox"/> Denuded/Eroded bank | |

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Parking on closed road.

8. Dominant Primary Substrate

- Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site?

Yes No No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children
- Wading-Adults
- Swimming
- Water skiing
- Diving
- Tubing
- Surfing
- Whitewater-kayaking, canoeing, rafting
- Other: _____
- frequent public swimming-created by publicly owned land / commercial operations
- No primary contact activities that commonly occur were observed

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual far - between 8 and 30 meters (100 ft)
- Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

None

3. Describe if there is public access (e.g. parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Parking on closed road

4. Are areas with primary contact recreation activities/ bathing beach (e.g. state/local parks with swimming, etc.) located near (e.g. w/in 5 miles upstream and downstream) this site?

Yes No

*Based on Google Maps Lake Tawakoni State Park is ~ 9 miles (straight l.) from the site
SD 2/9/11*

C. Secondary Contact Water Recreation Evaluation:

- **Secondary contact recreation 1:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- **Secondary contact recreation 2:** Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

- 1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g. secondary contact recreation activities)?
 - Yes
 - No secondary

a. Type of secondary contact recreation activities observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

b. Individuals observed at the site:

- None
- 1-10
- 11-20
- 20-50
- greater than 50

c. Check ALL that apply regarding the individuals proximity to the water body.

NA

- Secondary touch: fishing, pets and related contact with water
- In a boat touching water
- Body on shore near water within 8 meters (25ft) of water
- Body far away - 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

None

3. ~~If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion?~~ frequently infrequently

NA

Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. ~~If infrequently, what is the reason?~~ physical characteristics of the water body limited public access other

NA

If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

None

6. Describe why there is limited public access (e.g. lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

Steep overgrown banks

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

Sbanks slick and overgrown, water deeper than 1.0 M and not inviting.

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Bearing _____ 30 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

a) Substantial pools - Measure the length, width (@ widest point) and depth of each pool (if > 10 pools only measure 10 pools). A **substantial pool is >10 meters in length** for a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4	NA		
Pool 5		Too deep to wade	
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	
60 meters	1.30m JPW 7/20/11
90 meters	
120 meters	
150 meters	
180 meters	TDTW
210 meters	
240 meters	
270 meters	
300 meters	
Average	

Field Data Sheets – Basic RUAA Survey

c) Stream width - Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	
Width at narrowest point of the stream within 300 meter reach	NA
Width at the widest point of the stream within 300 meter reach	

d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 COMMENTS:

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Bearing 84 30 M Photo's Upstream 57 Downstream 58 Left Bank 59 Right Bank 60
 Bearing _____ 150 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Bearing _____ 300 M Photo's Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

61-63 & 64
 Additional
 Documentation

# Measurements	Width (meters)
1	16
2	
3	
4	
5	
6	
7	
8	
9	
10	

at bridge

Field Data Sheets – Basic RUAA Survey

F. Stream Site Location Summary

1. Check the following activities observed over the site reach.

- Drinking or water in mouth
- Bathing
- Walking
- Jogging/running
- Bicycling
- Standing
- Sitting
- Lying down/sleeping
- Playing on shoreline
- Picnicking
- Motorcycle/ATV
- Hunting/Trapping
- Wildlife watching
- None
- Other: _____

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- Culverts
- Barbed wire
- Utility pipe
- Fences
- Log jams
- Thick vegetation
- Other (specify): _____
- Rip rap
- Low bridges
- Water control structure
- None

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

*new
06/30/11*

- Campgrounds
- Playgrounds
- Rural area
- Residential
- National forests
- Urban/suburban location
- Golf Course
- Sports Field
- Stairs/walkway
- Boating access (ramps)
- Beach
- Bridge crossing
- Commercial boating
- Trails/paths (hiking/biking)
- Paved parking lot
- Unimproved parking lot
- Roads (paved/unpaved)
- Populated area
- Docks or rafts
- Commercial outfitter
- Nearby school
- Power Line Corridor
- Parks (national/city/county/state)
- Public Property
- Other: _____
- None of the Above

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- Private Property
- No trespass sign
- Wildlife
- Steep slopes
- No public access
- No roads
- Fence
- Barge/ship traffic
- Industrial
- None of the Above
- Other: _____

Comments: _____

6. Check any indications of human use (Attach photos).

- Roads
- Rope swings
- Dock/platform
- Foot paths/prints
- Other: _____
- RV/ATV Tracks
- Camping Sites
- Fire pit/ring
- Fishing Tackle
- NPDES Discharge
- Gates on corridor
- Children's toys
- Remnant's of Kid's play
- Organized event
- No Human Presence

Comments: _____

Field Data Sheets – Basic RUAA Survey

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other
- Water Surface: clear scum foam debris oil
- Other:

8. Vertebrates Observed within 300 meter reach

*JFW
6/30/11*

- Snakes None slight presence moderate presence large presence
- Water Dependent Birds None slight presence moderate presence large presence
- Alligators None slight presence moderate presence large presence

Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
- Domesticated Pets None slight presence moderate presence large presence
- Livestock None slight presence moderate presence large presence
- Feral Hogs None slight presence moderate presence large presence

Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
- Small garbage in the channel None Rare Common Abundant
- Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed: Carpet, plastic

12. Is the site located in a wildlife preserve with large wildlife (i.e waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated)

None

Field Data Sheets – Basic RUAA Survey

(to be completed for each site)

Data Collectors & Contact Information:	<i>L. Berna, S. Painter, J. White, E. Williams</i>
Date & Time:	<i>6/19/2011 10pm</i>
County Name:	<i>Hunt</i>
Stream Name:	<i>South Fork Sabine</i>
Segment No. or nearest downstream Segment No.:	
Description of Site:	<i>Kevin Shinn SFO07 SP 6/30/11</i>

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 - dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

 cfs *Flow meter malfunction. SP 7/6/11*

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: °C *79.0 F* Water Temp: 29.1 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	Urban	Rip rap
<u> </u> Shrub dominated corridor	<u> </u> Pasture	<u> </u> Concrete
<u> </u> Herbaceous marsh	<u> </u> Row crops	Other (specify): <u> </u>
<u> </u> Mowed/maintained corridor	<u> </u> Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

 Only accessible through private property

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine R.
Date: 5/19/11

Site: Kevin Shinn
Time: 1pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable so 7/16

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

wildlife, muddy water, stumps

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? possibly Lake Tawakoni State Park

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 5/19/2011

Site: Kevin Shinn
Time: 6:00

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50

- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
n/a muddy water, stumps, snakes + turtles etc

- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep banks

- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
Only accessible through Kevin Shinn property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
Started at an area known as the "Ash Hole", the "Long Hole" was upstream

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: Kevin Shinn
 Date: 5/19/11 Time: 1:00 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 131 Downstream 132 Left Bank 133 Right Bank 134
 Photos #s (150 meters) Upstream 137 Downstream 128 Left Bank 129 Right Bank 130
 Photos #s (300 meters) Upstream 123 Downstream 124 Left Bank 125 Right Bank 126

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg -Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>1.34</u>
60 meters	<u>1.20</u>
90 meters	<u>1.40</u>
120 meters	<u>1.60</u>
150 meters	<u>1.50</u>
180 meters	<u>1.65</u>
210 meters	<u>1.40</u>
240 meters	<u>1.55</u>
270 meters	<u>1.60</u>
300 meters	<u>1.40</u>
Average	<u>1.46</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: Kevin Shimm
 Date: 5/19/11 Time: 6pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	910
Width at narrowest point of the stream within 300 meter reach	8
Width at the widest point of the stream within 300 meter reach	11

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: Kevin Shian
 Date: 5/19/2011 Time: 6 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: Yes, Lake Tawakoni is a reservoir, backs up to that site

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|--|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <u>logs, stumps</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Roads | <input checked="" type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUA Survey

Stream Name: S. Fork Sabine Site: Kevin Shinn
 Date: 5/19/11 Time: 6pm

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence

Comments: Observed great blue heron, ducks

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence

Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed:

Cooler, sunscreen container

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Kevin Shinn (Landowner) caught an alligator snapping turtle,
level of turtles + snakes, muddy, stumps
usually a couple feet higher when lake is full
fishing for catfish often, some times allows
friends to fish + hunt; Game warden sometimes
boats up the river to look for poachers, depth finder read ~10ft.

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

32° 54.81' N
96° 18.33' W

Data Collectors & Contact Information:	J. Muir, S. Painter, J. White, P. Williams
Date & Time:	6/3/11 @ 9:20am
County Name:	Rockwall
Stream Name:	S. Fork Sabine
Segment No. or nearest downstream Segment No.:	05079-04
Description of Site:	Sabine Creek Ranch (SF001)

SP 7/6/11

A. Stream Characteristics:

- Check the following channel flow status that applies:
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

5.91 cfs SP 7/6/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 31.1 °C Water Temp: 25.9 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<input type="checkbox"/> Forest	<input type="checkbox"/> Urban	<input type="checkbox"/> Rip rap
<input type="checkbox"/> Shrub dominated corridor	<input checked="" type="checkbox"/> Pasture	<input type="checkbox"/> Concrete
<input type="checkbox"/> Herbaceous marsh	<input type="checkbox"/> Row crops	Other (specify): _____
<input type="checkbox"/> Mowed/maintained corridor	<input type="checkbox"/> Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Only accessible through private property, backside of property, no road but there is a low water crossing

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 6/3/11

Site: Sabine Creek Ranch
Time: 9:20am

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

steep, vegetated banks, channel obstructions

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? yes @ Sabine Creek Ranch

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed by 7/5/11
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 6/3/11

Site: Sabine Creek Ranch
Time: 9:00am

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep, vegetated banks, channel obstructions
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep, vegetated banks, channel obstructions
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFO01
 Date: 6/3/11 Time: 9:20am

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 1 Downstream 2 Left Bank 3 Right Bank 4
 Photos #s (150 meters) Upstream 5 Downstream 6 Left Bank 7 Right Bank 8
 Photos #s (300 meters) Upstream 13 Downstream 14 Left Bank 15 Right Bank 16

Extra photos:
 9) stream access
 10) 11 - Debris in channel
 12 - bank debris from

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

17) Gar w/tire / finger
 18) Check and Trash
 19) Flood debris
 20) Low Hyd Crossing
 20) Debris

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.90 m
60 meters	1.1 m
90 meters	1.0 m
120 meters	1.2 m
150 meters	1.1 m
180 meters	1.05 m
210 meters	0.90 m
240 meters	0.94 m
270 meters	0.72 m
300 meters	1.30 m
Average	1.02 m

SP 6/30/11

JAW
6/2/11

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SF001
 Date: 6/3/11 Time: 9:20am

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach, and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5.5
Width at narrowest point of the stream within 300 meter reach	4
Width at the widest point of the stream within 300 meter reach	6.5

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFO01
 Date: 4/3/11 Time: 9:20am

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|--|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <u>logs, floating</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFO07
 Date: 6/3/11 Time: 9:20am

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: 1 saw snake

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests Raccoon

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

tires (B @ road crossing), household, bottles

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

SP 7/6/11

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

320° 54' 38.7" N
96° 17.9' W

Data Collectors & Contact Information:	J. Muir, S. Painter, J. White, P. Williams	
Date & Time:	6/3/11 @ 10:50	County Name: Rockwall
Stream Name:	S.F. Sabine	
Segment No. or nearest downstream Segment No.:	05076-04	
Description of Site:	Mike McBowen	SFB002 SP 6/20/11

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow
 Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.36 cfs SP 7/6/11

4. Water Quality Data (Field Parameters)
Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 32.8 °C Water Temp: 26.6 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Forest | <input type="checkbox"/> Urban | <input type="checkbox"/> Rip rap |
| <input type="checkbox"/> Shrub dominated corridor | <u>R,L</u> <input type="checkbox"/> Pasture | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Herbaceous marsh | <input type="checkbox"/> Row crops | Other (specify): _____ |
| <input type="checkbox"/> Mowed/maintained corridor | <input type="checkbox"/> Denuded/Eroded bank | |

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

only accessible through private property, right bank is steep + heavily vegetated creating difficult access, left bank is vegetated but eroded, easily accessed

8. Dominant Primary Substrate
 Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 6/3/11

Site: 6/3/11 SFC02
 Time: 10:50 am

37 6/30/11

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

steep vegetated banks, overhanging vegetation

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

yes @ Sabine Creek Ranch

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 6/3/11

Site: S Fork Sabine SFS 002
Time: 10:50am

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep, vegetated banks, over hanging vegetation, channel obstructions (logs)
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep, vegetated banks, over hanging vegetation, channel obstructions (logs)
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets - Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFP02
 Date: 6/3/11 Time: 10:50 am

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 22 Downstream 23 Left Bank 24 Right Bank 25
 Photos #s (150 meters) Upstream 27 Downstream 28 Left Bank 29 Right Bank 30
 Photos #s (300 meters) Upstream 33 Downstream 34 Left Bank 35 Right Bank 36

*Extra #26 - Livestock tracks + river sedge
 #31 - Livestock trail*

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

*#32 - tires in channel
 #37 - flood debris
 #38 - washed out low water crossing
 #39 - point of entry*

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.87</u>
60 meters	<u>0.67</u>
90 meters	<u>1.10</u>
120 meters	<u>1.15</u>
150 meters	<u>1.40</u>
180 meters	<u>0.90</u>
210 meters	<u>0.74</u>
240 meters	<u>0.50</u>
270 meters	<u>0.97</u>
300 meters	<u>0.70</u>
Average	<u>0.89</u>

at 6/3/11

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 6/3/11

Site: SF8002
 Time: 10:50 am

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4
Width at narrowest point of the stream within 300 meter reach	3
Width at the widest point of the stream within 300 meter reach	6

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUA Survey

Stream Name: S. Fork Sabine
 Date: 6/3/11

Site: SF002
 Time: 10:50 am

F. Additional RUA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|--|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <u>logs</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
 Date: 6/3/11

Site: SFS 002
 Time: 10:50 am

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: ^{sp} absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil *mostly clear, some debris*
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: catfish, crawfish

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

files, household trash, bottles

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

n/a

32° 54.298° N
96° 17.021' W

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

Data Collectors & Contact Information:	J. Blair, S. Painter, J. White, E. Williams
Date & Time:	6/8/11 @ 12:10 pm
County Name:	Hunt
Stream Name:	Santa Fork Sabine
Segment No. or nearest downstream Segment No.:	0507G-04
Description of Site:	#18 - Hwy 276

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.37 cfs

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 29.8 °C Water Temp: 20.0 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R,L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Accessible from Hwy 276 bridge crossing

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine
Date: 6/3/11

Site: #18
Time: 12:10

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

shallow depth, steep vegetated banks, channel garbage

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Accessible from Hwy 276 bridge crossing

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine

Site: #18

Date: _____

Time: _____

- b. Check the number of individuals observed at the site
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation)
Shallow depth, steep vegetated banks
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
 Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body ^{OK} limited public access other 2EW 6/30/11
 If other, list reasons: Nearby vegetated Hwy easement x 5 foot tall
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
Shallow depth, steep vegetated banks, channel garbage
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation)
publically accessible from bridge

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S Fork Sabine

Site: 18

Date: 6/3/11

Time: 12:10 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 40 Downstream 41 Left Bank 42 Right Bank 43 #48 - water meadow
 Photos #s (150 meters) Upstream 44 Downstream 45 Left Bank 46 Right Bank 47
 Photos #s (300 meters) Upstream 49 Downstream 50 Left Bank 51 Right Bank 52 #53 - first water heater in channel

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

#54 - hog tracks
 #55 - debris under bridge
 #56 - mud swallow nests
 #57

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.32</u>
60 meters	<u>0.10</u>
90 meters	<u>0.82</u>
120 meters	<u>0.23</u>
150 meters	<u>0.14</u>
180 meters	<u>0.15</u>
210 meters	<u>0.14</u>
240 meters	<u>0.26</u>
270 meters	<u>0.20</u>
300 meters	<u>0.10</u>
Average	<u>0.246</u> <small>from 6/30/11</small>

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: #18
 Date: 6/3/11 Time: 12:10

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	2
Width at narrowest point of the stream within 300 meter reach	1
Width at the widest point of the stream within 300 meter reach	4.5 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine

Site: #18

Date: 6/13/11

Time: 12:12 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|--|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <u>debris</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|---|
| <input type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: thick ~~tree~~ vegetated right of way ≈ 5 foot tall post 6/30/11

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: 18
 Date: 6/13/11 Time: 12:10

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: observed 3 snakes

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed:

spool, tires, water heater, PVC pipes, oil filters

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

n/a

32° 53.87' N
96° 15.186' W

Field Data Sheets – Basic RUA Survey
(to be completed for each site)

Data Collectors & Contact Information:	D. Miller, J. Painter, J. White, E. Williams		
Date & Time:	6/3/11 @ 13:10	County Name:	Hunt Co
Stream Name:	S. Fork Sabine		
Segment No. or nearest downstream Segment No.	0507G-03		
Description of Site:	HIT - FM 1565 6/3/11		

A. Stream Characteristics:

- Check the following channel flow status that applies:
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

2.41 cfs

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 29.5 °C Water Temp: 25.5 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R,L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

accessible at bridge crossing

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: 3. Folk Sabine

Site: 17

Date: 4/13/11

Time: 18:10

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

slow, vegetated banks, log jam, shallow depth

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

accessible from FM 1565 + bridge, posted no trespassing signs on upstream side

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: #17
Date: 6/3/11 Time: 13:10

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep vegetated banks, log jams, shallow depths
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
 Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
 If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep vegetated banks, log jams, shallow depths
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
accession from FM 1525 bridge posted no trespassing signs on this side

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: #17
 Date: 6/3/11 Time: 13:10

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 58 Downstream 59 Left Bank 60 Right Bank 61 #62 - picture boundary
 Photos #s (150 meters) Upstream 63 Downstream 64 Left Bank 65 Right Bank 66 #67 - huge log jam
 Photos #s (300 meters) Upstream 69 Downstream 70 Left Bank 71 Right Bank 72 @ 150m #68 - just

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1	10m	7m	1.10m
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.50
60 meters	0.55
90 meters	0.65
120 meters	0.65
150 meters	0.85
180 meters	0.40
210 meters	0.53
240 meters	0.70
270 meters	0.70
300 meters	0.83 0.83m
Average	0.58m 0.64

0.64 SP w/30/11

#62 - picture boundary
 #67 - huge log jam
 @ 150m #68 - just
 log jam
 @ 210m
 #73-75
 entrance
 at foot
 of
 hog-
 track,
 meadow
 #76-78
 full
 grass on
 top of
 bank
 #76-77
 no trees,
 signs
 JAN
 6/3/11

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: #17
 Date: 6/3/11 Time: 13:10

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5
Width at narrowest point of the stream within 300 meter reach	3
Width at the widest point of the stream within 300 meter reach	7

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: #17
 Date: 6/3/11 Time: 13:10

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input checked="" type="checkbox"/> Other: <u>Large tributary</u> #172 |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |

Other: USGS gauging station

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: 717
 Date: 6/9/11 Time: 13:10

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
- Algae Cover: absent rare common abundant
- Odor: none rare common abundant
- Color: clear green red brown black
- Bottom Deposit: sludge solids fine sediments none other
- Water Surface: clear scum foam debris oil
- Other: bottom of stream was very muddy and difficult to walk through

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
- Water Dependent Birds None slight presence moderate presence large presence
- Alligators None slight presence moderate presence large presence
- Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
- Domesticated Pets None slight presence moderate presence large presence
- Livestock None slight presence moderate presence large presence
- Feral Hogs None slight presence moderate presence large presence
- Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests feral hogs

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
- Small garbage in the channel None Rare Common Abundant
- Bank Garbage None Rare Common Abundant
- Briefly describe the kinds of garbage observed:
a safe, household

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

Data Collectors & Contact Information:	Josh White, Eric Williams	
Date & Time:	7/8/11 @ 11:00 AM	County Name: HUNT
Stream Name:	South Fork Sabine	
Segment No. or nearest downstream Segment No.:	0507G-03	SP 7/10/11
Description of Site:	SF003 - Ricky Kennedy Property.	

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

0.11 cfs SP 7/10/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 30.5°C Water Temp: 27.4°C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R,L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult *gew 7/19/11*

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Through gate, @ R-Kennedys barn, and travel back to NW corner to access through 2nd gate then walked ≈ 60m.

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
Date: 7/8/11

Site: SFO03
Time: 11:00 AM

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable *see 7/10/11*

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

deep jams, steep banks, logs and log jams

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

No public access

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? NO

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Salome
Date: 7/8/11

Site: SFOO 3
Time: 11:00 AM

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50

- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
steep banks, logs, jams, shallow depths.

- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
steep banks, logs, jams, shallow depths

- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
Gates of R. Kennedy restrict access by public

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

N/A

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: SFO03
 Date: 7/8/11 Time: 11:00 AM

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 888 Downstream 889 Left Bank 890 Right Bank 891
 Photos #s (150 meters) Upstream 894 Downstream 895 Left Bank 896 Right Bank 897
 Photos #s (300 meters) Upstream 899 Downstream 900 Left Bank 901 Right Bank 902

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg –Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	.15
60 meters	.20
90 meters	.70
120 meters	.80
150 meters	.90
180 meters	.40
210 meters	.70
240 meters	1.00
270 meters	.80 .80
300 meters	.30
Average	0.55m

Extra Photographs

892- Trash

898- Snake-2

904- Downstream of bridge

893- Tire

903- Bridge

905- Upstream of bridge

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: SFD03
 Date: 7/8/11 Time: 11:00 AM

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4.00
Width at narrowest point of the stream within 300 meter reach	.30
Width at the widest point of the stream within 300 meter reach	7.0

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
 Date: 7/8/11

Site: SFO03
 Time: 11:00 AM

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input checked="" type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Salmon Site: SFOD 3
 Date: 7/8/11 Time: 11:00 AM

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:
Tires & household

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Field Data Sheets – Basic RUAA Survey

(to be completed for each site)

Data Collectors & Contact Information:	<u>Josh White, Eric Williams</u>
Date & Time:	<u>7/8/11 @ 9:00 AM</u> County Name: <u>Hunt</u>
Stream Name:	<u>South Fork Sabine River</u>
Segment No. or nearest downstream Segment No.:	
Description of Site:	<u>SFO04 @ Ricky Kennedy Property</u>

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 dry no flow low normal high flooded

2. Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

0.02 cfs on 7/11/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 27.1 °C

Water Temp: 27.1 °C 26.5

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	Urban	Rip rap
Shrub dominated corridor	Pasture	Concrete
Herbaceous marsh	Row crops	Other (specify): _____
Mowed/maintained corridor	Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Through R. Kennedy Private Gate, then drive ~.75 miles to NE side of property and then walked through gate ~ 300 yds.

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
Date: 7/8/11

Site: SFOOY
Time: 9:00

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable SP 7/8/11

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

log jams, narrow/shallow channel @ 60 meters and

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Private property. See photographs that show distance from land to where crew parked.

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

NO

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
Date: 7/8/11

Site: SFO024
Time: 9:00

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

steep vegetated banks, logs & log jams.

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?

physical characteristics of the water body limited public access other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

steep vegetated banks, logs and log jams.

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

Kennedy's property is all fenced and gated.

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

N/A

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Saline
 Date: 7/8/11

Site: SFO04
 Time: 9:00

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 873 Downstream 874 Left Bank 875 Right Bank 876 881 - Tracks
 Photos #s (150 meters) Upstream 877 Downstream 878 Left Bank 879 Right Bank 880 882 - Trash
 Photos #s (300 meters) Upstream 884 Downstream 885 Left Bank 886 Right Bank 887 883 - Tire

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>.70</u>
60 meters	<u>.34</u>
90 meters	<u>.34</u>
120 meters	<u>.95</u>
150 meters	<u>.50</u>
180 meters	<u>.25</u>
210 meters	<u>.90</u>
240 meters	<u>.40</u>
270 meters	<u>.35</u>
300 meters	<u>.45</u>
Average	<u>0.47m</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Salame Site: 5F004
 Date: 7/8/11 Time: 9:00

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	6.0m
Width at narrowest point of the stream within 300 meter reach	0.50m
Width at the widest point of the stream within 300 meter reach	10.0m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: SF004
 Date: 7/8/11 Time: 9:00

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input checked="" type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input checked="" type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: Smith Fork Salvo
 Date: 7/8/11

Site: SF004
 Time: 9:00

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: Saw 2 deer @ rivers edge.

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

Tires, bottled wine, household @ log jam.

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

32° 59.961' N
96° 12.894' W

Field Data Sheets – Basic RUA Survey
(to be completed for each site)

Data Collectors & Contact Information: <u>S. PRINTER, J. MUIR, J. WHITE, E. WILLIAMS</u>	
Date & Time: <u>6/3/11</u>	County Name: <u>Hunt</u>
Stream Name: <u>SOUTH FORK SABINE</u>	
Segment No. or nearest downstream Segment No.: <u>0507G-02</u>	
Description of Site: <u>15 Co Rd 2400</u>	

sp 7/6/11

A. Stream Characteristics:

1. Check the following channel flow status that applies.
 dry no flow low normal high flooded
2. Check the following stream type that applies on the day of the survey:
 Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

2.43 cfs sp 7/6/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 33.3 °C Water Temp: 27.4 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R/L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Accessible from Co Rd 2400 bridge

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabie
Date: 6/13/11

Site: #15
Time: 15:40

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
 Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
 Water skiing Diving Other: _____
 frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
 Primary touch: Individual's body (or portion) immersed in water
 Secondary touch: fishing, pets and related contact with water
 Individual is in a boat touching water
 Individual is on shore near water within 8 meters (25ft) of water
 Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation)

Shallow depth, trash, channel obstructions, odor, muck, logs (see)

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation)

accessible from Co Rd 2900, posted No Trespassing signs on upstream and downstream sides

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
 Boating-commercial, recreational
 Non-whitewater-kayaking, rafting, canoeing
 No secondary contact recreation activities were observed
 Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
Date: 6/13/11

Site: #15
Time: 15:40

b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50

c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
shallow depth, trash

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
shallow depth, trash, channel

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
 Date: 6/9/11

Site: #15
 Time: 15:40

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 95 Downstream 96 Left Bank 97 Right Bank 98
 Photos #s (150 meters) Upstream 99 Downstream 100 Left Bank 101 Right Bank 102
 Photos #s (300 meters) Upstream 103 Downstream 104 Left Bank 105 Right Bank 106

GNA Photos*
 ↓

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.32
60 meters	0.25
90 meters	0.20
120 meters	0.12
150 meters	0.80
180 meters	0.90
210 meters	0.50
240 meters	0.80
270 meters	0.62
300 meters	0.50
Average	0.50 m

#90 - Hog trail/tracks

#91 - old, cast-iron bridge

#92 - bird droppings on the bank

#93 - large garbage in channel

#94 - main channel, oxbow

#107 - hog wallows

#108 - water table feature
riffle

#109 - raccoon tracks

#110 - bags of trash

#111 - ditches off
of Corral
2400,
leads to
stream

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: #15
 Date: 6/3/11 Time: 15:40

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	6 m
Width at narrowest point of the stream within 300 meter reach	0.5 m
Width at the widest point of the stream within 300 meter reach	7 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
 Date: 6/13/11

Site: #15
 Time: 15:40

F. Additional RUAA Information

1. Check the following activities observed over the site reach

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos)

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest)

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest)

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos)

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine Site: #15
 Date: 6/3/11 Time: 15:40

7. Check all water characteristics that apply (Attach photos)

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: odors at 0m included anoxic muck and
rotting fish

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: coon observed

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests
 (bird)

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:
carpet, dog boxes, realtor sign, car grill, household
trash, bottles

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Evidence of fishing includes fish carcasses, fishing lure
hung up in tree

Field Data Sheets – Basic RUA A Survey
(to be completed for each site)

32° 53.1451' N
96° 12.009' W

Data Collectors & Contact Information:	J. Mair, S. Painter, J. White, E. Williams		
Date & Time:	06/03/11 @ 1720	County Name:	Mont
Stream Name:	S.F. Sabine		
Segment No. or nearest downstream Segment No.:	05076-02	SP	7/6/4
Description of Site:	SF005 - David Hartwig		

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.95 cfs

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 30.6 °C Water Temp: 26.4 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Only accessible through David Hartwig's property / neighbors property and agreement

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine

Site: SF005

Date: 6/3/11

Time: 17:30

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
 Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
 Water skiing Diving Other: _____
 frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body:

- Water in mouth or nose of the individual
 Primary touch: Individual's body (or portion) immersed in water
 Secondary touch: fishing, pets and related contact with water
 Individual is in a boat touching water
 Individual is on shore near water within 8 meters (25ft) of water
 Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation)

shallow depth, steep banks

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through private property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
 Boating-commercial, recreational
 Non-whitewater-kayaking, rafting, canoeing
 No secondary contact recreation activities were observed
 Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine

Site: SF005

Date: 4/3/11

Time: 1720

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
Shallow depth, steep banks
3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
Shallow depth, steep banks
6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
only accessible through private property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. Fork Sabine Site: SFA05
 Date: 6/3/11 Time: 1720

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 112 Downstream 113 Left Bank 114 Right Bank 115
 Photos #s (150 meters) Upstream 114 Downstream 117 Left Bank 118 Right Bank 119
 Photos #s (300 meters) Upstream 120 Downstream 121 Left Bank 122 Right Bank 123

Don't find trail (dry) bird droppings!!!
 (124)

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.14
60 meters	0.40
90 meters	0.44
120 meters	0.33
150 meters	0.50
180 meters	0.50
210 meters	0.50
240 meters	0.65
270 meters	0.30
300 meters	0.40
Average	0.42m

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Schive Site: SF005
 Date: 4/13/11 Time: 17:20

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4 m
Width at narrowest point of the stream within 300 meter reach	1.5 m
Width at the widest point of the stream within 300 meter reach	4.5 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: J.F. Sabine Site: 3F005
 Date: 6/2/11 Time: 1720

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams (500 ft) | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input checked="" type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Sabine Site: SF005
 Date: 6/13/11 Time: 1720

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: Catfish and

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests owl
coon bird

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

toys, coke bottle, tires

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

n/a

33° 52' 60" N
96° 10' 735" W

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

Data Collectors & Contact Information:	S. PAINTER, D. M. A. J. WHITE E. WILLIAMS
Date & Time:	6-4-2011 15:45 County Name: Hunt
Stream Name:	SOUTH FORK SABINE
Segment No. or nearest downstream Segment No.:	05076-02
Description of Site:	# 16 - Co Rd 2316

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow
 Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.69 cfs sp 7/6/11

4. Water Quality Data (Field Parameters)
Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.
 Air Temp: 31.3 °C Water Temp: 25.5 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):
Accessible from Co Rd 2316

8. Dominant Primary Substrate
 Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: S F Saline
Date: 6/4/11

Site: #16
Time: 15:45

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

logs on the bottom of the channel, garbage, moderately steep, vegetated banks

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

accessible from Co Rd 2316 road crossing

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine

Site: #16

Date: 6/4/11

Time: 15:45

- b. Check the number of individuals observed at the site.
 - None
 - 1-10
 - 11-20
 - 20-50
 - greater than 50

- c. Check the following that apply regarding the individuals proximity to the water body
 - Secondary touch: fishing, pets and related contact with water
 - In a boat touching water
 - Body on shore near water within 8 meters (25ft) of water
 - Body well away from water between 8 and 30 meters (100 ft)

- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

logs on the bottom of the channel, garbage, moderately steep vegetated banks - more flow would req'd for cat fishing ?

- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion?
 - frequently
 - infrequently
 Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

- 4. If infrequently, what is the reason?
 - physical characteristics of the water body
 - limited public access
 - other
 If other, list reasons: _____

- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

logs on bottom of the channel, garbage, moderately steep, vegetated banks

- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

accessible from Co Rd 2316 road crossing

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: #16
 Date: 6/4/11 Time: 15:45

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

no 33123 photos (Jaw 6/7/2011)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 155 Downstream 156 Left Bank 157 Right Bank 158 *Extra Photo*

Photos #s (150 meters) Upstream 159 Downstream 160 Left Bank 161 Right Bank 162 *#167-176*

Photos #s (300 meters) Upstream 163 Downstream 164 Left Bank 165 Right Bank 166 *garbage, obstructions, human use evidence*

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1	9 m	8 m	1 m
Pool 2	5 m	6 m	0.85 m
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.20
60 meters	1.00
90 meters	0.32
120 meters	0.45
150 meters	0.60
180 meters	0.63
210 meters	0.35
240 meters	0.85
270 meters	0.63
300 meters	0.40
Average	0.54 m

Field Data Sheets – Basic RUA Survey

Stream Name: 3F Sabine Site: #16
 Date: 6/4/11 Time: 15:45

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach, (2) the width at the narrowest point of the stream within the 300 meter reach, and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	5
Width at narrowest point of the stream within 300 meter reach	2.5
Width at the widest point of the stream within 300 meter reach	8

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____
 Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: F/C
 Date: 6/4/11 Time: 15:45

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Deck/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input checked="" type="checkbox"/> Foot paths/prints | <input checked="" type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: catfish carcasses at road crossing; foot path along bank, fishing line in tree

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Sabine Site: #16
 Date: 6/7/11 Time: 15:45

7. Check all water characteristics that apply (Attach photos).

Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

Tracks Fecal droppings Bird nests

11. Garbage Observed

Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant

Briefly describe the kinds of garbage observed:

mattress springs, water hoses, household

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Footbridge over washout in bank (part of a footpath
along the top of the bank) at ~200m downstream
Catfish carcasses (~9) on embankment on
upstream side of road crossing

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

32° 51.821' N
96° 9.362' W

Data Collectors & Contact Information:	S. PAINTER, J. WAJIR, J. WHITE, E. WILLIAMS
Date & Time:	6-4-2011 17:00 (5pm) County Name: HUNT
Stream Name:	SOUTH FORK SABINE
Segment No. or nearest downstream Segment No.:	0507G-01
Description of Site:	SFO06 - Carl McKinney property

st 7/1/11

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

2.43 cfs SP 7/6/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 31.3 °C Water Temp: 27.2 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank). Bank orientation is determined by the investigator facing downstream.)

<u>R,L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Assessible through Carl McKinney property

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Sabine
Date: 6/4/11

Site: SFD06
Time: 5 pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
 Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
 Water skiing Diving Other: _____
 frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
 Primary touch: Individual's body (or portion) immersed in water
 Secondary touch: fishing, pets and related contact with water
 Individual is in a boat touching water
 Individual is on shore near water within 8 meters (25ft) of water
 Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

log jams, insufficient depth

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

Only accessible through Carl McKinney property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site? no

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
 Boating-commercial, recreational
 Non-whitewater-kayaking, rafting, canoeing
 No secondary contact recreation activities were observed
 Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Section Site: SFEDG
Date: 6/4/11 Time: 5pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).
log in the channel
- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
 Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
 If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).
log in the channel
- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation)
only accessible through Carl Muck's property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
deer hunting on property, deer blinds in vicinity

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: 5F006
 Date: 6/4/11 Time: 5 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

1. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 177 Downstream 178 Left Bank 179 Right Bank 180 *Extra Photos*
 Photos #s (150 meters) Upstream 181 Downstream 182 Left Bank 183 Right Bank 184 *#189-190*
 Photos #s (300 meters) Upstream 185 Downstream 186 Left Bank 187 Right Bank 188

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>0.50</u>
60 meters	<u>0.31</u>
90 meters	<u>0.40</u>
120 meters	<u>0.40</u>
150 meters	<u>0.80</u>
180 meters	<u>0.58</u>
210 meters	<u>0.60</u>
240 meters	<u>0.38</u>
270 meters	<u>0.55</u>
300 meters	<u>0.45</u>
Average	<u>0.50m (2u)</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Subline Site: SF000
 Date: 4/4/11 Time: 5 pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	4.0m
Width at narrowest point of the stream within 300 meter reach	1.0m
Width at the widest point of the stream within 300 meter reach	5.0m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No
 Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Subirk Site: 350000
 Date: 6/2/11 Time: 5 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping : | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes. No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input checked="" type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: SF Sluice Site: SFO06
 Date: 6/4/11 Time: 5 pm

7. Check all water characteristics that apply (Attach photos)

Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: 1 snake

9. Mammals Observed within 300 meter reach

Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

Tracks Fecal droppings Bird nests

11. Garbage Observed

Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

Data Collectors & Contact Information	PAINTER / SMYR / J. WHITE / E. WILLIAMS
Date & Time:	6.4.2011 @ 5:45 pm County Name: HUNT
Stream Name:	SOUTH FORK SABINE
Segment No. or nearest downstream Segment No.:	0507G-01
Description of Site:	#14 - State Highway 34

7/6/11 ST

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Stream flow
 Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

1.25 cfs # 7/6/11

4. Water Quality Data (Field Parameters)
Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.
 Air Temp: 29.4 °C Water Temp: 29.0 °C

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank) Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):
Accessible from road next to SH 34, access under the bridge was easy, but rest of reach was difficult, with steep banks

8. Dominant Primary Substrate
 Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUAA Survey

Stream Name: South Fork Sabine
 Date: 6/4/11

Site: M14
 Time: 5:45pm

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

steep, vegetated banks, murky water, channel obstructions
logs in channel, poisonous snakes

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

accessible from road next to SH 24

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine
Date: 6/4/11

Site: #14
Time: 5:45pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)

2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

steep, vegetated banks, murky water, log in channel, poisonous snakes

3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly

4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons:

NEW 6/5/11

5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

SAME AS #2

6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).

accessible from road next to SH34

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.

Ample evidence of secondary contact recreation, specifically fishing. Trail from access road to easy bank access under the bridge

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: # 19
 Date: 6/14/11 Time: 5:45pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 191 Downstream 192 Left Bank 193 Right Bank 194 *Extra photos*
 Photos #s (150 meters) Upstream 195 Downstream 199 Left Bank 200 Right Bank 201 *# 196-197*
 Photos #s (300 meters) Upstream 205 Downstream 206 Left Bank 207 Right Bank 208 *202-204*

a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1	12.0m	10m	1.5m
Pool 2	15.0	12.0m	1.5m
Pool 3		12.0m few	
Pool 4		6/13/11	
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	0.90
60 meters	0.70
90 meters	1.30
120 meters	0.52
150 meters	0.80
180 meters	1.40
210 meters	0.72
240 meters	0.42
270 meters	0.60
300 meters	0.70
Average	0.83m

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: 1114
 Date: 6/14/11 Time: 5:45 pm

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	8.5 m
Width at narrowest point of the stream within 300 meter reach	6 m
Width at the widest point of the stream within 300 meter reach	12 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at _____

Photos #s (30 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (150 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

Photos #s (300 meters) Upstream _____ Downstream _____ Left Bank _____ Right Bank _____

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: # 14
 Date: 6/4/11 Time: 5:45 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)
 Comments: _____

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|---|--|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input checked="" type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): _____ | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input checked="" type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input type="checkbox"/> Private Property | <input type="checkbox"/> Fence | <input checked="" type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input checked="" type="checkbox"/> Foot paths/prints | <input checked="" type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: fishing tackle included - hooks, bobbers, sinkers, packaging for bobbers, bait containers

Field Data Sheets – Basic RUAA Survey

Stream Name: S. E. Sakina
 Date: 6/4/11

Site: #14
 Time: 5:45 pm

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black *algae on top*
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: _____

8. Vertebrates Observed within 300 meter reach

- Snakes *new* None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: _____

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments: _____

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

beer cans, trash from floods

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

lots of fishing evidence

Field Data Sheets – Basic RUAA Survey
(to be completed for each site)

32° 51.818' N

96° 8.127' W

Data Collectors & Contact Information:	J. Munc, S. Painter, J. White, E. Williams		
Date & Time:	6/4/11 @ 6:30 pm	County Name:	Plant
Stream Name:	S. Fork Sabine		
Segment No. or nearest downstream Segment No.:	05076-01	SP	7/10/11
Description of Site:	Kevin Shinn Property 5F007		

A. Stream Characteristics:

- Check the following channel flow status that applies.
 dry no flow low normal high flooded
- Check the following stream type that applies on the day of the survey:
 - Ephemeral: A stream which flows only during or immediately after a rainfall event, and contains no refuge pools capable of sustaining a viable community of aquatic organisms.
 - Intermittent: A stream which has a period of zero flow for at least one week during most years. Where flow records are available, a stream with a 7Q2 flow of less than 0.1 cubic feet per second is considered intermittent.
 - Intermittent w/ perennial pools: An intermittent stream which maintains persistent pools even when flow in the stream is less than 0.1 cubic feet per second.
 - Perennial: A stream which flows continuously throughout the year. Perennial streams have a 7Q2 equal to or greater than 0.1 cubic feet per second.
 - Designated or unclassified tidal stream: A stream that is tidally influenced. If you checked this box, you will need to contact the Water Quality Standards Group and evaluate whether or not a bathing beach is located along the tidal stream and whether or not a bathing beach is located along the estuary, bay or Gulf water that the tidal stream flows into.

3. Streamflow

Use USGS gage data (if a gage is located at a site or within a quarter mile of a site) or use the Stream Flow (Discharge) Measurement Form and follow the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1, RG-415. If USGS gage data is used for a site, include that information as an attachment and list the streamflow on the sampling date below. If the stream flow taken at one site is representative of the flow at another site(s), then that flow can be used as the observed flow and should be documented below. If the stream flow measured at one site is different from another site, then stream flow should be taken at both sites.

— cfs Too deep to wade. SP 7/10/11

4. Water Quality Data (Field Parameters)

Field parameters should be collected in accordance with the procedures outlined in the most recent TCEQ Surface Water Quality Monitoring Procedures, Volume 1.

Air Temp: 31.7 °C Water Temp: 31.8 °C
32.8

5. Riparian Zone (Mark dominant categories with L (Left Bank) and R (Right Bank) Bank orientation is determined by the investigator facing downstream.)

<u>R, L</u> Forest	_____ Urban	_____ Rip rap
_____ Shrub dominated corridor	_____ Pasture	_____ Concrete
_____ Herbaceous marsh	_____ Row crops	Other (specify): _____
_____ Mowed/maintained corridor	_____ Denuded/Eroded bank	

6. Ease of bank access to the water body: Easy Moderately easy Moderately difficult Difficult

7. Please describe access opportunities or explain why the site is not easily accessible (Attach photos for documentation):

Only accessible through the Kevin Shinn property j used Shinn utility vehicle to drive ~2 mi to bank

8. Dominant Primary Substrate

Cobble Sand Silt Mud/Clay Gravel Bedrock Rip rap Concrete

Field Data Sheets – Basic RUA Survey

Stream Name: S. F. Sabine
 Date: 6/2/11

Site: SF007
 Time: 6:30 p.m.

B. Primary Contact Water Recreation Evaluation:

- Primary contact recreation draft definition: Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting, involving a significant risk of ingestion of water.

1. Were water recreation activities that involve a significant risk of ingestion (full body immersion) observed at this site? Yes No primary contact recreation activities were observed

a. Check the following boxes of primary contact recreation activities observed at the time of the sampling event at the site (Attach photos of the activities or lack of activities).

- Wading-Children Tubing No primary contact activities that commonly occur were observed
- Wading-Adults Surfing Swimming Whitewater-kayaking, canoeing, rafting
- Water skiing Diving Other: _____
- frequent public swimming-created by publicly owned land or commercial operations

b. Check the number of individuals observed at the site: None 1-10 11-20 20-50 >50

c. Check the following that apply regarding the individuals proximity to the water body.

- Water in mouth or nose of the individual
- Primary touch: Individual's body (or portion) immersed in water
- Secondary touch: fishing, pets and related contact with water
- Individual is in a boat touching water
- Individual is on shore near water within 8 meters (25ft) of water
- Individual is well away from water between 8 and 30 meters (100 ft) Not applicable

2. If primary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of primary contact (depth, etc.) (Attach photos, etc. for documentation).

mucky water very mucky bottom with logs, channel obstructions, poisonous snakes

3. Describe if there is public access (e.g., parks, roads, etc.) (Attach photos, maps, etc. for documentation).

only accessible through Shin property

4. Is an area with primary contact recreation activities or a bathing beach (e.g., state/local parks with swimming, etc.) located near (e.g., within 5 miles upstream and downstream) this site?

Lake Tanakau State Park?

C. Secondary Contact Water Recreation Evaluation:

- Secondary contact recreation 1: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion and that commonly occur.

- Secondary contact recreation 2: Water recreation activities, such as fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity, not involving a significant risk of water ingestion but that occur less frequently than for secondary contact recreation 1 due to (1) physical characteristics of the water body and/or (2) limited public access.

1. Were water recreation activities observed at the site, but the nature of the recreation does not involve a significant risk of ingestion (e.g., secondary contact recreation activities)? Yes No secondary contact recreation activities were observed.

a. Check the following boxes of secondary contact recreation activities that were observed at the time of the sampling event at the site (Attach photos of activities or lack of activities).

- Fishing
- Boating-commercial, recreational
- Non-whitewater-kayaking, rafting, canoeing
- No secondary contact recreation activities were observed
- Other secondary contact activities: _____

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine Site: 5F007
Date: 6/4/11 Time: 6:30 pm

- b. Check the number of individuals observed at the site.
 None 1-10 11-20 20-50 greater than 50
- c. Check the following that apply regarding the individuals proximity to the water body.
 Secondary touch: fishing, pets and related contact with water
 In a boat touching water
 Body on shore near water within 8 meters (25ft) of water
 Body well away from water between 8 and 30 meters (100 ft)
- 2. If secondary contact recreation activities are not observed, describe the physical characteristics of the water body that may hinder the frequency of secondary contact (Attach photos, etc. for documentation).

- 3. If secondary contact recreation activities are observed, how often do water recreational activities occur that do not involve a significant risk of water ingestion? frequently infrequently
Please describe how often the activities occur? Unknown Never Daily Monthly Yearly
- 4. If infrequently, what is the reason?
 physical characteristics of the water body limited public access other
If other, list reasons: _____
- 5. Describe the physical characteristics of the water body that hinders the frequency of secondary contact recreation (depth, etc.) (Attach photos or depth measurements, etc. for documentation).

- 6. Describe why there is limited public access (e.g., lack of roads, river or stream banks overgrown, etc.) (Attach photos, maps, etc. for documentation).
Accessible through Kevin Shinn property

D. Noncontact Recreation Evaluation

Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion, and where primary and secondary contact recreation uses do not occur because of unsafe conditions, such as barge traffic.

- 1. Provide site-specific information and documentation (including photographs) regarding unsafe conditions, recreation activities, and presence or absence of water recreation activities.
n/a

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine
 Date: 6/4/11

Site: 5507
 Time: 4:30 pm

E. Stream Channel and Substantial Pools Measurements

Please check the following which best describes the river or stream: Wadeable Non-wadeable

I. Wadeable Streams

Determine whether or not the average depth at the thalweg is greater than 0.5 meters and if there are substantial pools with a depth of 1 meter or greater. Walk an approximately 300 meter reach (total) at the site and take the following measurements within the 300 meter reach. Measurements should be taken during base flow conditions (sustained or typical dry, warm-weather flows between rainfall events, excluding unusual antecedent conditions of drought or wet weather)

Also, take photos facing upstream, downstream, left bank, and right bank at the 30 meters, 150 meters, and 300 meters.

Photos #s (30 meters) Upstream 210 Downstream 211 Left Bank 212 Right Bank 213 *Extra Photos 002 - beaver evidence*
 Photos #s (150 meters) Upstream 214 Downstream 215 Left Bank 216 Right Bank 217
 Photos #s (300 meters) Upstream 218 Downstream 219 Left Bank 220 Right Bank 221 *003 - fecal droppings*

- a) Substantial pools - Measure the length of each pool (if > 10 pools only measure 10 pools), the width (at the widest point), and the deepest depth. A substantial pool is considered a pool greater than 10 meters in length for the purposes of a Basic RUAA Survey. If depth and/or width measurements were not attainable, explain why.

	Length (meters)	Width (meters)	Depth (meters)
Pool 1			
Pool 2			
Pool 3			
Pool 4			
Pool 5			
Pool 6			
Pool 7			
Pool 8			
Pool 9			
Pool 10			

- b) Average depth at the thalweg - Take depth measurements approximately every 30 meters to calculate an average depth at the thalweg (at least 10 measurements needed). If depth and/or width measurements were not attainable, explain why.

Distance	Depth (meters)
30 meters	<u>1.70</u>
60 meters	<u>1.62</u>
90 meters	<u>2.00</u>
120 meters	<u>1.30</u>
150 meters	<u>1.20</u>
180 meters	<u>1.00</u>
210 meters	<u>1.50</u>
240 meters	<u>1.05</u>
270 meters	<u>1.40</u>
300 meters	<u>1.00</u>
Average	<u>1.38m</u>

Field Data Sheets – Basic RUAA Survey

Stream Name: S. F. Sabine Site: 5F007
 Date: 6/4/11 Time: 6:30 p.m.

- c) Stream width – Measure (1) the width at one point which represents the typical average width of the 300 meter reach; (2) the width at the narrowest point of the stream within the 300 meter reach; and (3) the width at the widest point of the stream within the 300 meter reach.

Measurement Type	Width (meters)
Typical Average Width of 300 meter reach	10 m
Width at narrowest point of the stream within 300 meter reach	8 m
Width at the widest point of the stream within 300 meter reach	11 m

- d) Is there sufficient water within a 300 meter stream reach during base flow conditions to support primary contact recreation? Yes No

Comments: _____

2. Non-wadeable Streams

If accessible, take 10 width measurements which represent typical widths of the 300 meter reach. If the water is too deep and not accessible record the estimated average width of the water body.

Also, take photos facing upstream, downstream, left bank, and right bank at .

Photos #s (30 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (150 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___
 Photos #s (300 meters) Upstream ___ Downstream ___ Left Bank ___ Right Bank ___

# Measurements	Width (meters)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabine

Site: 5P007

Date: 6/04/11

Time: 6:30 pm

F. Additional RUAA Information

1. Check the following activities observed over the site reach.

- | | |
|---|---|
| <input type="checkbox"/> Drinking or water in mouth | <input type="checkbox"/> Playing on shoreline |
| <input type="checkbox"/> Bathing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Motorcycle/ATV |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Hunting/Trapping |
| <input type="checkbox"/> Bicycling | <input type="checkbox"/> Wildlife watching |
| <input type="checkbox"/> Standing | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Sitting | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lying down/sleeping | |

2. Are there permanent or long-term hydrologic modifications that are constructed and operated in a way that affects the recreational uses? Yes No (If yes, please provide supporting documentation and photos.)

Comments: Lake Tawakoni backs up into channel

3. Check any channel obstructions that apply (Attach photos).

- | | | | | |
|---------------------------------------|--|---|--------------------------------------|--|
| <input type="checkbox"/> Culverts | <input type="checkbox"/> Fences | <input type="checkbox"/> Log jams | <input type="checkbox"/> Rip rap | <input type="checkbox"/> Water control structure |
| <input type="checkbox"/> Barbed wire | <input type="checkbox"/> Dams | <input type="checkbox"/> Thick vegetation | <input type="checkbox"/> Low bridges | <input type="checkbox"/> None |
| <input type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <u>logs</u> | | | |

4. Check all surrounding conditions that promote recreational activities (Attach photos of evidence or unusual items of interest).

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Campgrounds | <input type="checkbox"/> Stairs/walkway | <input type="checkbox"/> Roads (paved/unpaved) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Playgrounds | <input type="checkbox"/> Boating access (ramps) | <input type="checkbox"/> Populated area | <input type="checkbox"/> None of the Above |
| <input checked="" type="checkbox"/> Rural area | <input type="checkbox"/> Beach | <input type="checkbox"/> Docks or rafts | |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Bridge crossing | <input type="checkbox"/> Commercial outfitter | |
| <input type="checkbox"/> National forests | <input type="checkbox"/> Commercial boating | <input type="checkbox"/> Nearby school | |
| <input type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input type="checkbox"/> Power Line Corridor | |
| <input type="checkbox"/> Golf Course | <input type="checkbox"/> Paved parking lot | <input type="checkbox"/> Parks (national/city/county/state) | |
| <input type="checkbox"/> Sports Field | <input type="checkbox"/> Unimproved parking lot | <input type="checkbox"/> Public Property | |

Comments: _____

5. Check all surrounding conditions that impede recreational activities (Attach photos of evidence or unusual items of interest).

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Private Property | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> No trespass sign |
| <input type="checkbox"/> Barge/ship traffic | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Industrial |
| <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> None of the Above | <input checked="" type="checkbox"/> No public access |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> No roads | |

Comments: _____

6. Check any indications of human use (Attach photos).

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Roads | <input checked="" type="checkbox"/> RV/ATV Tracks | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Organized event |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Gates on corridor | <input type="checkbox"/> No Human Presence |
| <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> Children's toys | |
| <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play | |
| <input type="checkbox"/> Other: _____ | | | |

Comments: ATV track to bank @ 150 m

Field Data Sheets – Basic RUAA Survey

Stream Name: S.F. Sabie Site: 5F007
 Date: 10/4/11 Time: 1:30 PM

7. Check all water characteristics that apply (Attach photos).

- Aquatic Vegetation: absent rare common abundant
 Algae Cover: absent rare common abundant
 Odor: none rare common abundant
 Color: clear green red brown black
 Bottom Deposit: sludge solids fine sediments none other
 Water Surface: clear scum foam debris oil
 Other: thin algae film on surface

8. Vertebrates Observed within 300 meter reach

- Snakes None slight presence moderate presence large presence
 Water Dependent Birds None slight presence moderate presence large presence
 Alligators None slight presence moderate presence large presence
 Comments: duck

9. Mammals Observed within 300 meter reach

- Wild None slight presence moderate presence large presence
 Domesticated Pets None slight presence moderate presence large presence
 Livestock None slight presence moderate presence large presence
 Feral Hogs None slight presence moderate presence large presence
 Comments:

10. Evidence of wild animals or evidence of birds, cattle, hogs, etc.

- Tracks Fecal droppings Bird nests

11. Garbage Observed

- Large garbage in the channel None Rare Common Abundant
 Small garbage in the channel None Rare Common Abundant
 Bank Garbage None Rare Common Abundant
 Briefly describe the kinds of garbage observed:

cooler, cans, bottles

12. Is the site located in a wildlife preserve with large wildlife (i.e., waterfowl) population? Yes No

13. Please document any other relevant information regarding recreational activities and the water body in general (for example, area outside of the stream reach evaluated).

