

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter
Date & Time:	06/24/2010 @ 5:45pm
County Name:	Gregg Co
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505B-03
Description of Site:	Site # 11 - FM 1844

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 U.A.A.

32° 35' 28.6443" N  
94° 48' 48.6227" W

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

4. Water Quality Data (Field Parameters)

Air Temp

34.5 °C

Water Temp

— °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"/> <u>R,L</u> 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):

Accessible from FM 1844, but no parking is available, private property up and downstream, and channel vegetation is very thick.  
exists

8. Dominant Primary Substrate

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

SR 6/27/11

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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).

- Wading-Children
  - Wading-Adults
  - Swimming
  - Water skiing
  - Diving
  - Tubing
  - Surfing
  - Whitewater-kayaking, canoeing, rafting
  - Other: \_\_\_\_\_
- No primary contact activities that commonly occur were observed
- 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).

shallow depth, narrow channel, low flow,  
very poor water quality, culvert + util. pipe

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

Accessible from FM 1844

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).
shallow depth, narrow channel, low flow, very poor water quality, 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 depth, narrow channel, low flow, very poor water quality, 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).
Accessible from FM 1844 but no parking available, private property up and downstream

**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 facilities for non-contact recreation

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**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 190° 30 M Photo's Upstream 76 Downstream 77 Left Bank 78 Right Bank 79  
 Bearing \_\_\_\_\_ 150 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_  
 Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_

#80-gas line

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)
<u>30</u> meters	<u>very shallow</u>
60 meters	
90 meters	
120 meters	
150 meters	
180 meters	
210 meters	
240 meters	
270 meters	
300 meters	
Average	

**Clarification:**  
 (6/27/11 S.P.)  
 Depth measurements were not taken due to physical inaccessibility and concerns about private property.

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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	22 m estimated
Width at narrowest point of the stream within 300 meter reach	-
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 \_\_\_\_\_ 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	

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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: \_\_\_\_\_

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:

thick oil sheen and oil odor

## 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: none observed from bridge

## 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: none observed from bridge

## 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).

very low flow rate, not quite stagnant  
(comparable to site #13)Thalweg depth measurements and discharge  
measurements not obtained due to inaccessibility



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams & Stephanie Painter
Date & Time:	06/26/2010 @ 4:30pm County Name: Gregg Co.
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505B-03
Description of Site:	Site # 13 - McCann Creek Rd

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 U.A.A.

A. Stream Characteristics:

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

32° 34' 31.7096"N

94° 47' 54.7881"W

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. .0007 cms .025 cfs

4. Water Quality Data (Field Parameters)

Air Temp

34.5 °C

Water Temp

32.4 °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 type="checkbox"/> Forest	<input type="checkbox"/> Urban	<input type="checkbox"/> Rip rap
<input type="checkbox"/> Shrub dominated corridor	<input checked="" type="checkbox"/> <u>R,L</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

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

Easy access from private road, on private property.

8. Dominant Primary Substrate

Cobble  Sand  Silt  Mud/Clay  Gravel  Bedrock  Rip rap  Concrete

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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).

- 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).

very shallow depth, narrow channel

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

accessible from private 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

### 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).

very shallow depth, narrow channel, low flow

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).

very shallow depth, narrow channel, low flow

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 private road; sign prohibits fishing and other recreational activities (photo #64)

**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.

*Private property*

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**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 106 30 M Photo's Upstream 65 Downstream 66 Left Bank 67 Right Bank 68  
 Bearing 54 150 M Photo's Upstream 69 Downstream 70 Left Bank 71 Right Bank 72  
 Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_

#64- Sign

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.

**Clarification:**

(6/27/11 SP)  
 Field crew walked upstream to 150m to take photos. Due to concerns about private property, the crew quickly returned to the truck without recording depth measurements.

Distance	Depth (meters)
30 meters	0.25
60 meters	not measured / very shallow
90 meters	
120 meters	
150 meters	
180 meters	
210 meters	
240 meters	
270 meters	
300 meters	
Average	0.25

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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	~ 172 m
Width at narrowest point of the stream within 300 meter reach	—
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 \_\_\_\_\_ 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	

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

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: *Sign prohibits fishing, and other recreational activity (photo # 104)*

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: \_\_\_\_\_

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 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).

*Steep, overgrown banks; private property on both sides; shallow depth, narrow channel*

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

*Steep, overgrown banks; private property on both sides*

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).

shallow depth, narrow channel, lots of overhanging vegetation 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).

shallow depth, narrow channel, lots of overhanging vegetation 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).

steep, overgrown banks; private property on both sides

**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.

*Very difficult access and nature of the stream make recreational usage unlikely*

**E. Stream Channel and Substantial Pools Measurements**

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

*@ Bridge crossing*

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 150° 03' M Photo's Upstream 58 Downstream 59 Left Bank 60 Right Bank 61  
 Bearing \_\_\_\_\_ 150 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_  
 Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_

*upstream side #62 - LB #63 - RB*

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 Basia 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	<i>Not attainable</i>
60 meters	
90 meters	
120 meters	
150 meters	
180 meters	
210 meters	
240 meters	
270 meters	
300 meters	
Average	

*Clarification SP 6/28/11 Not attainable due to physical inaccessibility and private property concerns.*

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 m
Width at narrowest point of the stream within 300 meter reach	-
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:

*observed from bridge*

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: \_\_\_\_\_

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: significant amounts of household debris observed from bridge

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: observed from bridge, unknown

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 from bridge, unknown

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: observed from bridge, unknown

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: observed from bridge, 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).

Thalweg depth measurements and discharge measurements not obtained due to inaccessibility



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter	
Date & Time:	6/26/2010 @ 3pm	County Name: Gregg Co
Stream Name:	Grace Creek	
Segment No. or nearest downstream Segment No.:	0505B-02	
Description of Site:	Site #8 - Spring Hill Rd	

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° 33' 13.81" N  
94° 45' 59.70" W

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 Private property

4. Water Quality Data (Field Parameters)

Air Temp 31.3 °C Water Temp — °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):

No access - private property with barbed wire fence on all four sides

8. Dominant Primary Substrate

Cobble  Sand  Silt  Mud/Clay  Gravel  Bedrock  Rip rap  Concrete @ Bridge crossing

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)

shallow depth, narrow channel

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

No access - private property with barbed wire fence on all four sides

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).

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).

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).

No access - private property with barbed wire fence on all four sides

**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.

Inaccessible (see photo #57)

**E. Stream Channel and Substantial Pools Measurements**

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

<sup>SP</sup>  Non-wadeable @ bridge crossing

**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 178° 30 M Photo's Upstream 53 Downstream 54 Left Bank 55 Right Bank 56 #53 178°  
Bearing \_\_\_\_\_ 150 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_  
Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_ #57 - fence

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)
<del>30 meters</del> <u>0</u>	<u>0.20</u>
60 meters	<u>not attainable</u>
90 meters	
120 meters	
150 meters	
180 meters	
210 meters	
240 meters	
270 meters	
300 meters	
<b>Average</b>	<u>0.20</u>

Clarification:  
Not attainable due to private property concerns.  
SP 4/28/11

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	~ 2 m
Width at narrowest point of the stream within 300 meter reach	-
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 \_\_\_\_\_ 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: none observed at bridge crossing

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: \_\_\_\_\_

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: none observed from bridge

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: observed from 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: observed from bridge

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: observed from bridge

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: observed from bridge

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).

Thalweg depth measurements and discharge measurements not obtained due to inaccessibility



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	<i>Eric Williams + Stephanie Painter</i>
Date & Time:	<i>6/26/2010 @ 1:45 pm</i> County Name: <i>Gregg Co</i>
Stream Name:	<i>Grace Creek</i>
Segment No. or nearest downstream Segment No.:	<i>0505B-02</i>
Description of Site:	<i>Site #7 - Hawkins Pkwy</i>

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° 32' 53.3616" N  
94° 45' 56.2035" W*

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. *0.017 cms .058 cfs*

4. Water Quality Data (Field Parameters)

Air Temp *31.3 °C* Water Temp *27.8 °C*

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

<i>R, L</i> 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 Hawkins Pkwy on south side; North side is fenced off with barbed wire*

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).

low depth, narrow channel

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

accessible from the south side of Hawkins Pkwy

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).  
low 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).  
low 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 from South Side of Hopkins Pkwy

**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.

Observed motorcycle trucks under bridge

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**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 140° 30 M Photo's Upstream 41 Downstream 42 Left Bank 43 Right Bank 44  
 Bearing 178° 150 M Photo's Upstream 45 Downstream 46 Left Bank 47 Right Bank 48  
 Bearing 156° 300 M Photo's Upstream 49 Downstream 50 Left Bank 51 Right Bank 52

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	<u>0.21</u>
60 meters	<u>0.54</u>
90 meters	<u>0.30</u>
120 meters	<u>0.22</u>
150 meters	<u>0.20</u>
180 meters	<u>0.20</u>
210 meters	<u>0.40</u>
240 meters	<u>0.10</u>
270 meters	<u>0.13</u>
300 meters	<u>0.15</u>
Average	<del>0.23</del> <u>0.245</u>

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	3
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

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	

GC#7

GC#7

### 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: Fence on North side

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 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).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	S. Painter & E. Williams
Date & Time:	10/26/2010 @ 11:30am County Name: Gregg Co
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505B-02
Description of Site:	#5 - State Highway #281

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° 31' 30.3645" N  
94° 45' 37.4519" W

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. 0.0473 cms 1.67 cfs

4. Water Quality Data (Field Parameters)

Air Temp 32.8 °C Water Temp 29.5 °C

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

<input type="checkbox"/> Forest	<input checked="" type="checkbox"/> R, L 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):

Vegetation overgrows on banks

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).

- 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).

low depth, narrow channel, difficult to cross, vegetation overgrowth on banks

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

Difficult access from S.H. 281

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).

low depth, narrow channel, vegetation overgrowth on 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).

low depth, narrow channel, vegetation overgrowth on 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).

Difficult access from SH 281

**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.

*Dak. Forest country club adjacent to upstream, east side of Grace Creek.*

**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 130° 30 M Photo's Upstream 26 Downstream 27 Left Bank 28 Right Bank 29  
 Bearing 130° 150 M Photo's Upstream 30 Downstream 31 Left Bank 32 Right Bank 33  
 Bearing 80° 300 M Photo's Upstream 34 Downstream 35 Left Bank 36 Right Bank 37

*converging  
diverging  
channel  
#40 Discharge  
measurement  
location*

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	0.25
60 meters	0.13
90 meters	0.25
120 meters	0.38
150 meters	0.05
180 meters	0.10
210 meters	0.09
240 meters	0.21
270 meters	0.25
300 meters	0.08
Average	0.18

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
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

COMMENTS:

*One area with significant depth, very poor water quality*

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.

- |   |   |
|---|---|
| <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: <i>getting adjacent to stream</i> |
| <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 checked="" type="checkbox"/> Utility pipe | <input checked="" type="checkbox"/> Other (specify): <i>channelized under bridge</i> |   |                                      |  |

## 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 checked="" 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 checked="" type="checkbox"/> Urban/suburban location | <input type="checkbox"/> Trails/paths (hiking/biking) | <input checked="" type="checkbox"/> Power Line Corridor     |  |
| <input checked="" 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 checked="" 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: \_\_\_\_\_

## 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

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:

*significant amounts of oil*

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*

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).

*Confluence of two channels occurs just upstream of bridge (see photo # 38 + 39)*

*Flow measurement taken ~ 50 m downstream of bridge (see photo # 40)*

GC#5

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

Stream: Grace Creek Date: 07/24/2010  
 Site: 0508-21 0505B-02 Site  
 Description: Site # 5 - Grace Creek @ SH # 281  
 Time Begin: 12:00 Time End: 12:20 Meter Type: Type AA  
 Observers: E. Williams + S. Park Stream Width\*: 1.6 m Section Width (W): 0.2  
 Observations:

Section Midpoint (m)	Section Depth (m) (cm) (D)	Observational Depth** (m)	Velocity (V)		Flow (Q) (m <sup>3</sup> /s) Q = (W)(D)(V)
			At Point (m/s)	Average (m/s)	
0.1	0.08	.048		0.056	.000896
0.3	0.18	.108		0.190	.00684
0.5	0.22	.072		0.274	.012056
0.7	0.18	.108		0.133	.004788
0.9	0.18	.108		0.291	.010476
1.1	0.14	.096		0.257	.008224
1.3	0.12	.072		0.169	.004056
1.5	0.04	.024		0	-
					<u>.047336</u>

CFS  
 .0316  
 .241  
 .425  
 .169  
 .369  
 .290  
 .143  
1.67 cfs

Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter
Date & Time:	10/24/2010 @ 10:00 am
County Name:	Gregg Co
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505 B-02
Description of Site:	Site #10 - H.G. Mosley Parkway

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 U.A.A.

A. Stream Characteristics:

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

32° 31' 30.3440" N  
94° 45' 37.4429" W

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. 0.022 cms 0.781 cfs

4. Water Quality Data (Field Parameters)

Air Temp

30.5 C

Water Temp

28.4 °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"/> 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):

Access at bridge on H.G. Mosley

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).

- 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).

Large Rip Rap utility pipe below water surface

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

Bridge crossing on H.C. Mosley, seem to be an extension of the walking trail out of Lois Jackson Park

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 **No**  
SP

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).

Large dip trap & utility pipe below water surface

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).

Narrow stream channel up + down stream, up rap, low 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).

City property w/ locked gate on one 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.

*Area is under construction; soon to be an extension of walking trail from Lois Jackson park*

**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 100° 30 M Photo's Upstream 14 Downstream 15 Left Bank 100 Right Bank 17  
 Bearing 180° 150 M Photo's Upstream 18 Downstream 19 Left Bank 20 Right Bank 21  
 Bearing 136° 300 M Photo's Upstream 22 Downstream 23 Left Bank 24 Right Bank 25

*Photo #13 - No Training sign*

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	<u>0.40</u>
60 meters	<u>0.28</u>
90 meters	<u>0.15</u>
120 meters	<u>0.53</u>
150 meters	<u>0.38</u>
180 meters	<u>0.60</u>
210 meters	<u>0.15</u>
240 meters	<u>0.45</u>
270 meters	<u>0.40</u>
300 meters	<u>0.90</u>
<b>Average</b>	<u>0.42</u>

## 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	6.5m
Width at narrowest point of the stream within 300 meter reach	2.5m
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.

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.

- |   |   |
|---|---|
| <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 checked="" type="checkbox"/> Bicycling       | <input type="checkbox"/> Wildlife watching    |
| <input checked="" type="checkbox"/> Standing        | <input 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> Residential             | <input checked="" type="checkbox"/> Bridge crossing              | <input type="checkbox"/> Commercial outfitter               |  |
| <input type="checkbox"/> National forests                   | <input checked="" type="checkbox"/> Commercial boating           | <input type="checkbox"/> Nearby school                      |  |
| <input checked="" type="checkbox"/> Urban/suburban location | <input checked="" 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 checked="" 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 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 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 checked="" type="checkbox"/> Other: <i>graffiti</i> |   |  |  |

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: conduct, lines

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).

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Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	<i>E. Williams + S. Painter</i>
Date & Time:	<i>6/26/2010 @ 8:30am</i> County Name: <i>Gregg Co</i>
Stream Name:	<i>Cypress Creek</i>
Segment No. or nearest downstream Segment No.:	<i>0505 B_02</i>
Description of Site:	<i>Site #6 - E. Fairmont St</i>

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

*32° 30' 52.8927" N*  
*94° 45' 37.3804" W*

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. *0.0604 cms* *2.13 cfs*

4. Water Quality Data (Field Parameters)

Air Temp *28.9°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><i>R, L</i></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 by bridge crossing from Fairmont Street.*  
*Moderate steep banks*

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).

- Wading-Children  Tubing  No primary contact activities that commonly occur were observed
 Wading-Adults  Surfing
 Swimming  Whitewater-kayaking, canoeing, rafting
 Water skiing  Other:
 Diving  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).

low water depth, utility pipe upstream.

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

Walking trails through park cross river in at least 2 locations

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).

low depth with some 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).

Low depth, debris in channel (i.e. metal, concrete culvert (old))

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).

Overgrown stream 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.

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**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 204° 30 M Photo's Upstream 1 Downstream 2 Left Bank 3 Right Bank 4 Photo #2  
 Bearing 216° 150 M Photo's Upstream 5 Downstream 6 Left Bank 7 Right Bank 8  
 Bearing 198° 300 M Photo's Upstream 9 Downstream 10 Left Bank 11 Right Bank 12

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	0.25
60 meters	0.33
90 meters	0.63
120 meters	0.55
150 meters	0.15
180 meters	0.08
210 meters	0.12
240 meters	0.43
270 meters	0.20
300 meters	0.26
Average	0.30

**Field Data Sheets – Basic RUA 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	6.5m
Width at narrowest point of the stream within 300 meter reach	2.5m
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.

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.

- |   |   |
|---|---|
| <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 checked="" type="checkbox"/> Bicycling (A)   | <input type="checkbox"/> Wildlife watching    |
| <input type="checkbox"/> Standing                   | <input 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> Urban/suburban location | <input checked="" 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 checked="" type="checkbox"/> Parks (national/city/county/state) |  |
| <input type="checkbox"/> Sports Field                       | <input type="checkbox"/> Unimproved parking lot                  | <input checked="" 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: \_\_\_\_\_  
\_\_\_\_\_

## 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 type="checkbox"/> Fishing Tackle | <input type="checkbox"/> Remnant's of Kid's play |  |
| <input type="checkbox"/> Other: _____                 |   |  |  |

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: concrete blocks 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).

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Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	E. Williams + S. Painter
Date & Time:	6/25/2010 5:35pm County Name: Gregg Co.
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505B-02
Description of Site:	Site #9 - US Hwy 80

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° 30' 01.5816" N  
94° 45' 13.6070" W

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. 1130 cms 3.98 cfs

4. Water Quality Data (Field Parameters)

Air Temp 30.4 °C Water Temp 29.5 °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):

Fairly easy to access from Hwy 80;  
can drive + park near river; some steep vegetated banks

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).

Depth is sufficient; lots of debris in channel (old metal cart, old pipe, tires); poisonous snakes

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

Easily accessible from Hwy 30

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).

Debris in channel, steep banks in places

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).

moderately steep banks, channel 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).

Sufficient access from Hwy 80

**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.

Evidence of fishing, photo #226 shows tackle

**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 196° 30 M Photo's Upstream 215 Downstream 216 Left Bank 217 Right Bank 218  
 Bearing 164° 150 M Photo's Upstream 219 Downstream 220 Left Bank 221 Right Bank 222  
 Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_

Extra photos  
 #223 Trib  
 #224 Main channel  
 #225 Garbage  
 #226 Fishing evidence

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			
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.

Clarification on following page. see 01/27/11

	Distance	Depth (meters)
# 215-218	<del>30 meters</del> u/s 60m	0.65
	<del>90 meters</del> D/S 30m	1.5 - 1.3+
	90 meters	0.60
	120 meters	2.0m +
#219-222	150 meters u/s	0.45m
	180 meters	
	210 meters	
	240 meters	
	270 meters	
	300 meters	
	Average	Unknown

non-wadeable  
 non-wadeable

non-wadeable see 3/2/11

estimated ~1m see 7/25/11

GC #9

**Field Data Sheets – Basic RUAA Survey**

Stream Name: \_\_\_\_\_ Site: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

**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 \_\_\_\_\_ 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 \_\_\_\_\_

- 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	1.30
60 meters	0.65
90 meters	0.60
120 meters	2.00
150 meters	0.45
180 meters	
210 meters	Non-readable
240 meters	
270 meters	
300 meters	
<b>Average</b>	<b>1.00</b>

Clarification  
S.P. 6/27/11

**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
Width at narrowest point of the stream within 300 meter reach	1
Width at the widest point of the stream within 300 meter reach	10

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: \_\_\_\_\_

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: multiple homeless

## 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 debris, tires, old metal cart, old pipe

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).

At ~150m, stream splits: major main channel (photo # 224) was not accessible. Trib/ minor channel had very low flow (photo #223) most accessible area for fishing has a lot of garbage on the bank (photo # 225)

Upload  
223 + 225



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter
Date & Time:	06/25/2010 3:40pm County Name: Gregg Co.
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0505B-01
Description of Site:	#0 - W. Cotton St

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° 29' 14.17" N  
94° 45' 15.16" W

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. 2069 cms 7.30 CFS

4. Water Quality Data (Field Parameters)

Air Temp 30.3 °C Water Temp 29.2 °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):

Main access is very steep, treacherous - 3ft drop

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).

Debris in channel - pipe, tires, chairs, gas canister; steep banks, presence of poisonous snakes

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

Difficult Access from the Cotton Rd

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).

Debris in channel, 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).

Debris in channel, steep banks, presence of

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).

Difficult, steep access from Cotton Rd.

**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 facilities.

No noncontact recreation facilities,  
lots of debris

**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 210 30 M Photo's Upstream 200 Downstream 201 Left Bank 202 Right Bank 203  
Bearing 220 150 M Photo's Upstream 204 Downstream 205 Left Bank 206 Right Bank 207  
Bearing 170 300 M Photo's Upstream 208 Downstream 209 Left Bank 210 Right Bank 211  
211 212 213 214

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.

Clarification on following page. see 6/28/11

-30 1.30  
0 0.40  
30 0.58  
60 +1.90

Distance	Depth (meters)
30 meters	<u>211-214</u> <u>sp 0.58</u> <u>1.30 non-wadeable</u>
60 meters	<u>sp 0.80</u> <u>0.40</u>
90 meters	<u>200-203</u> <u>sp 1.90</u> <u>0.58 non-wadeable sp</u>
120 meters	<u>204-207</u> <u>1.90 n +</u>
150 meters	
180 meters	<u>+30 m +</u>
210 meters	
240 meters	
270 meters	
300 meters	
Average	<u>non-wadeable</u>

non-wadeable sp  
non-wadeable

estimate of 1.045 m  
see 7/29/11

GC #0

## Field Data Sheets – Basic RUAA Survey

Stream Name: \_\_\_\_\_ Site: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

## 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 \_\_\_\_\_ 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 \_\_\_\_\_

- 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	1.30
60 meters	0.40
90 meters	0.58
120 meters	1.90
150 meters	
180 meters	
210 meters	Non-wadeable.
240 meters	
270 meters	
300 meters	
<b>Average</b>	<b>1.05</b>

### 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	8
Width at narrowest point of the stream within 300 meter reach	7
Width at the widest point of the stream within 300 meter reach	10

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

COMMENTS:

confirmed by Eric the waterdog

#### 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.

- |   |   |
|---|---|
| <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 checked="" 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 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 checked="" 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 checked="" type="checkbox"/> Unimproved parking lot | <input checked="" 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: \_\_\_\_\_

## 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

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: \_\_\_\_\_

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).

Bridge currently a construction area;  
 putting in new drainage pipe



Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Stephanie Painter + Eric Williams	
Date & Time:	6/25/2010	County Name: Gregg
Stream Name:	Grace Creek	
Segment No. or nearest downstream Segment No.:	0505-B1	
Description of Site:	#1 - SH 31 @ Grace Creek	

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

320 29 / 33.1367" N  
940 45 / 16.1290" W

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.

183 cms  
0.1586 cms 5.59 CFS

4. Water Quality Data (Field Parameters)

Air Temp 34.3 °C Water Temp 28.4 °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"/> 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): <del>condition of</del> sp |
| <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 31

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).

- 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).

Lots of channel debris - pipe, cables, metal, rip-rap - unsafe access, steep banks

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

Access from S.H 31

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).

Lots of debris in the channel, 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).

Lots of debris in the channel, 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).

Accessible from Ste 31

**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.

*Homeless presence - clothing, cardboard box used as a pad, feces*

**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 170° 30 M Photo's Upstream 08 Downstream 189 Left Bank 190 Right Bank 191  
 Bearing 160° 150 M Photo's Upstream 192 Downstream 193 Left Bank 194 Right Bank 195  
 Bearing 170° 300 M Photo's Upstream 196 Downstream 197 Left Bank 198 Right Bank 199

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	0.84
60 meters	0.84
90 meters	0.94
120 meters	1.18
150 meters	1.25+
180 meters	0.18
210 meters	0.21
240 meters	0.15
270 meters	0.40
300 meters	0.95
Average	0.60 <sup>sp</sup> 4

*(non-wadeable)*

**D.64 m**

*SP 6/28/11*

### 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	11
Width at narrowest point of the stream within 300 meter reach	4
Width at the widest point of the stream within 300 meter reach	15

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.

- |   |   |
|---|---|
| <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 checked="" 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 checked="" type="checkbox"/> Utility pipe | <input type="checkbox"/> Other (specify): <u>old bridge piers</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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> Other: <u>Debris</u> |
| <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 checked="" 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: Cardboard box pad/homeless person hangout

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: some scum

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: metal debris, 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).

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Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information:	Eric Williams + Stephanie Painter
Date & Time:	6/25/2010 County Name: Gregg
Stream Name:	Grace Creek
Segment No. or nearest downstream Segment No.:	0905B-01
Description of Site:	Subine Golf Rd @ Grace Creek Site #3

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.

320 28' 54.8828" N  
940 45' 18.4714" W

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. 0.2182ms 7.70 cfs

4. Water Quality Data (Field Parameters)

Air Temp  $\uparrow$  sp 99.8 °C 320C      Water Temp  $\uparrow$  sp 84.6 °C 30.50C  
 $\uparrow$  sp 92.8

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 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):

Fairly steep, vegetated and debris-strewn banks

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).

- Wading-Children  Tubing  No primary contact activities that commonly occur were observed
 Wading-Adults  Surfing
 Swimming  Whitewater-kayaking, canoeing, rafting
 Water skiing  Other:
 Diving  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).

Debris in channel, particularly rocks + logs

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

Accessible from Sabine Rd.

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).

steep vegetated banks, debris in river

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, debris in river

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).

Access available via Sabine Rd.

**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 non-contact recreational facilities available

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**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

*w/ non-wadeable sections*

Bearing 192° 30 M Photo's Upstream 179 Downstream 180 Left Bank 181 Right Bank 182  
 Bearing 176° 150 M Photo's Upstream 183 Downstream 184 Left Bank 185 Right Bank 186  
 Bearing \_\_\_\_\_ 300 M Photo's Upstream \_\_\_\_\_ Downstream \_\_\_\_\_ Left Bank \_\_\_\_\_ Right Bank \_\_\_\_\_

*Photo # 187  
Fish heads*

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.

*Clarification on following page. s.p. 6/28/11*

Distance	Depth (meters)
30 meters	<i>0.20 m</i>
60 meters	<i>0.68 m</i>
90 meters	<i>1.50 m</i>
120 meters	<i>0.45 m</i>
150 meters	<i>1.35 m</i>
180 meters	<i>Not wadeable</i>
210 meters	<i>ir</i>
240 meters	<i>ir</i>
270 meters	<i>ir</i>
300 meters	<i>ir</i>
<b>Average</b>	<i>0.83 m up to 150 m</i>

GC #3

## Field Data Sheets – Basic RUAA Survey

Stream Name: \_\_\_\_\_ Site: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

## 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 \_\_\_\_\_ 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 \_\_\_\_\_

- 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	0.20
60 meters	0.68
90 meters	1.50
120 meters	0.45
150 meters	1.35
180 meters	
210 meters	
240 meters	Non-readable
270 meters	
300 meters	
<b>Average</b>	0.84 m

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
Width at narrowest point of the stream within 300 meter reach	4
Width at the widest point of the stream within 300 meter reach	10

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
- Log jams
- Thick vegetation
- Rip rap
- Low bridges
- Water control structure
- None
- Other (specify): \_\_\_\_\_

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: concern about poisonous snakes

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: fishing line, fished heads on bridge (see photo # 187)

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: large water snake observed on 4/25

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, a couch, other small, general debris

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).

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Field Data Sheets – Basic RUAA Survey

Data Collectors & Contact Information: <u>Eric Williams + Stephanie Painter</u>	
Date & Time: <u>06/25/2010</u>	County Name: <u>Gregg Co</u>
Stream Name: <u>Grace Creek</u>	
Segment No. or nearest downstream Segment No.: <u># 0505B-01</u>	
Description of Site: <u>#2 - Loop 281</u>	

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

32° 27' 44.00" N  
94° 44' 59.95" W

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. 0.2489 cms 8.78 cfs

4. Water Quality Data (Field Parameters)

Air Temp

28.9 °C

Water Temp

28.7 °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):

fairly steep, vegetated banks  
(photos 176-178)

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).

Wading-Children  Tubing  No primary contact activities that commonly occur were observed  
 Wading-Adults  Surfing  
 Swimming  Whitewater-kayaking, canoeing, rafting  
 Water skiing  Other: \_\_\_\_\_  
 Diving  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).

Pipe (utility?) crossing the stream; debris in the channel (logs + rocks), steep banks; the presence of poisonous snakes

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

easily accessible by public from Hwy 281

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

State Park d/s on the Sabine. # miles? 15

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)

n/a

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).

Pipes (utility?) crossing the stream; debris in the channel (logs + refuse); 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

n/a

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).

Pipes (utility?) crossing the stream; debris in the channel (logs + refuse); 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).

steep banks, some overgrowth of vegetation

**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 facilities for non-contact recreation*

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**E. Stream Channel and Substantial Pools Measurements**

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

*w/ some non-wadeable sections*

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 180° 30 M Photo's Upstream 165 Downstream 164 Left Bank 166 Right Bank 167 *Out of order*  
 Bearing 184° 150 M Photo's Upstream 168 Downstream 169 Left Bank 170 Right Bank 171  
 Bearing 144° 300 M Photo's Upstream 172 Downstream 173 Left Bank 174 Right Bank 175  
*extra { 176, 177, 178*

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.

*Clarification on following page. SP 6/28/11*

Distance	Depth (meters)
30 meters	0.90
60 meters	0.70
90 meters	0.60
120 meters	0.50
150 meters	0.23
180 meters	0.71
210 meters	1.16
240 meters	1.3+
270 meters	non-wadeable, 1.3+
300 meters	non-wadeable
Average	0.76 plus

## Field Data Sheets – Basic RUAA Survey

Stream Name: \_\_\_\_\_ Site: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

## 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 \_\_\_\_\_ 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 \_\_\_\_\_

- 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	0.40
60 meters	0.70
90 meters	0.60
120 meters	0.50
150 meters	0.23
180 meters	0.71
210 meters	1.16
240 meters	1.30
270 meters	I Non-wadeable
300 meters	I
<b>Average</b>	0.70

**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	16 est.
Width at narrowest point of the stream within 300 meter reach	10-15 est.
Width at the widest point of the stream within 300 meter reach	18 est.

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

COMMENTS:

*Some sections are deep enough for swimming*

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: Very low dam-like structure (see photo # 176)

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: Snakes are a concern

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: Litter in channel

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:

small amounts of oil or scum

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: small mammal tracks

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: cars, wrappers, bottles, newspaper vending machine

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).

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