

Missouri  
Department of  
Natural Resources

Use Attainability Analysis

for

WBID 0207 Big Creek

Submitted by  
Pickett Ray and Silver

To  
Missouri Department of Natural Resources  
Water Protection Program

Date Received: June 5, 2007

**Field Data Sheets for Recreational Use Stream Surveys**



**Missouri Department of Natural Resources  
Data Sheet A - Water Body Identification**

**I. Water Body Information** (for water body being surveyed)

Water Body Name (from USGS 7.5' quad): <b>Big Creek</b>	
Missouri Waterbody Identification (WBID) Number: <b>0207</b>	
8-digit HUC: <b>7110008</b>	County: <b>Lincoln</b>
Upstream Legal Description (from Table H): <b>25, 48N, 1W</b>	
Downstream Legal Description (from Table H): <b>8, 47N, 2W</b>	
Number of sites evaluated <b>3</b>	
List all sites numbers, listed consequently upstream to downstream:	
<b>1 - Big Creek Rd./Camp Charren Rd.; 2 - Hwy. J. Bridge; 3 - Meyer Rd. Bridge</b>	

**Site Locations Map(s):** Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. **Attached**

**II. Subsegmentation** (fill this section out only in cases where subsegmentation is being proposed)

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Upstream Coordinates:		Downstream Coordinates:	
<b>UTM X</b>	<b>Y</b>	<b>UTM X</b>	<b>Y</b>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
EPE	± _____ Feet or ± _____ Meters		
PDOP		± _____ Feet or ± _____ Meters	

**III. Discharger Facility Information** (list all permitted dischargers on the stream)

Discharger Facility Name(s): <b>Warrenton WWTP</b>
Discharger Permit Number(s): <b>MO 0087912</b>

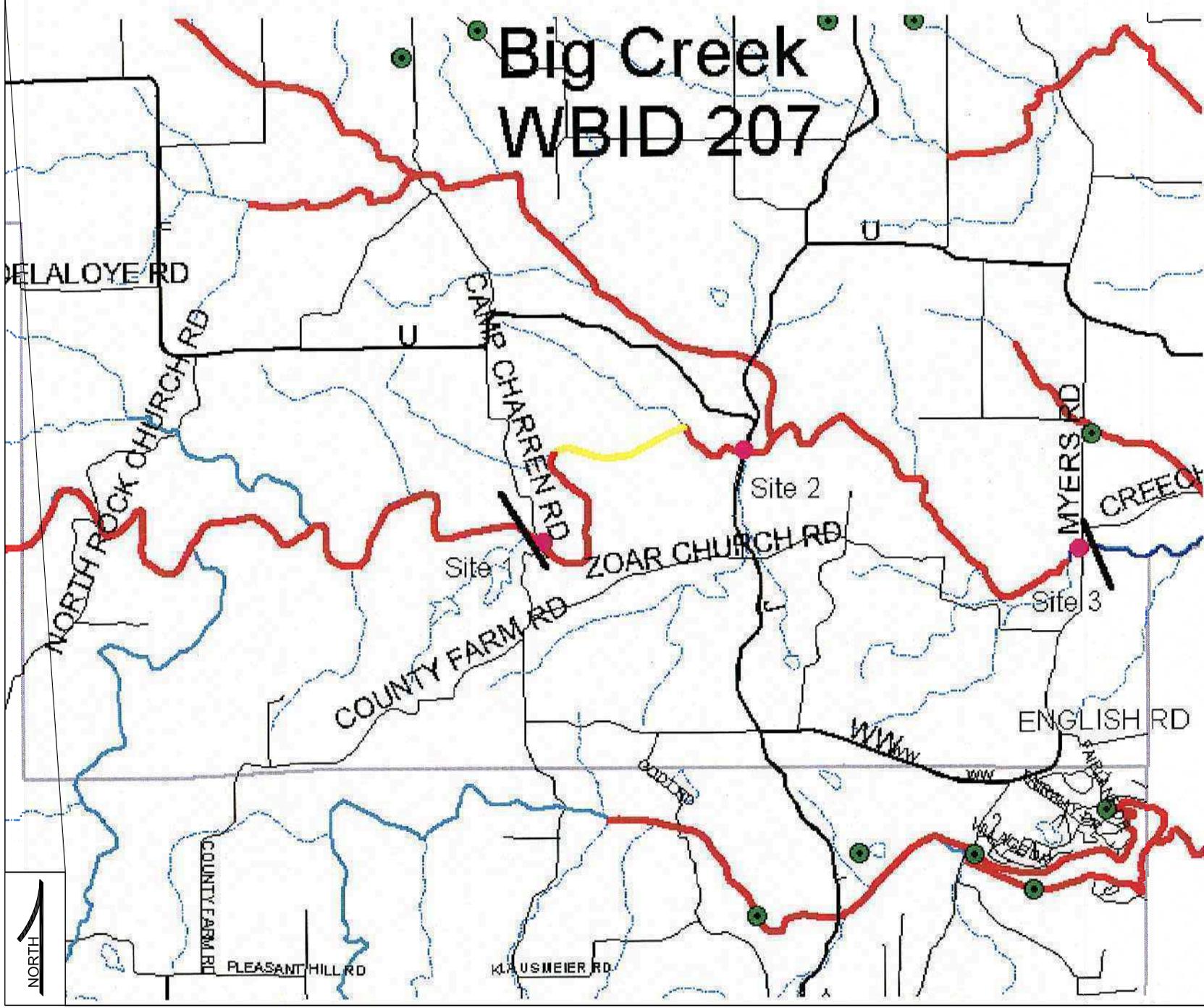
**IV. UAA Surveyor** (please print legibly)

Name of Surveyor <b>R. Martin</b>	Telephone Number: <b>573-875-7844</b>
Organization/Employer: <b>AE Solutions</b>	
Position: <b>Env. Specialist</b>	

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

**Signed: Renee Martin**

**Date: 5/14/07**



# Big Creek WBID 207

**PICKETT RAY & SILVER**  
 Civil Engineers Land Surveyors Natural Resources

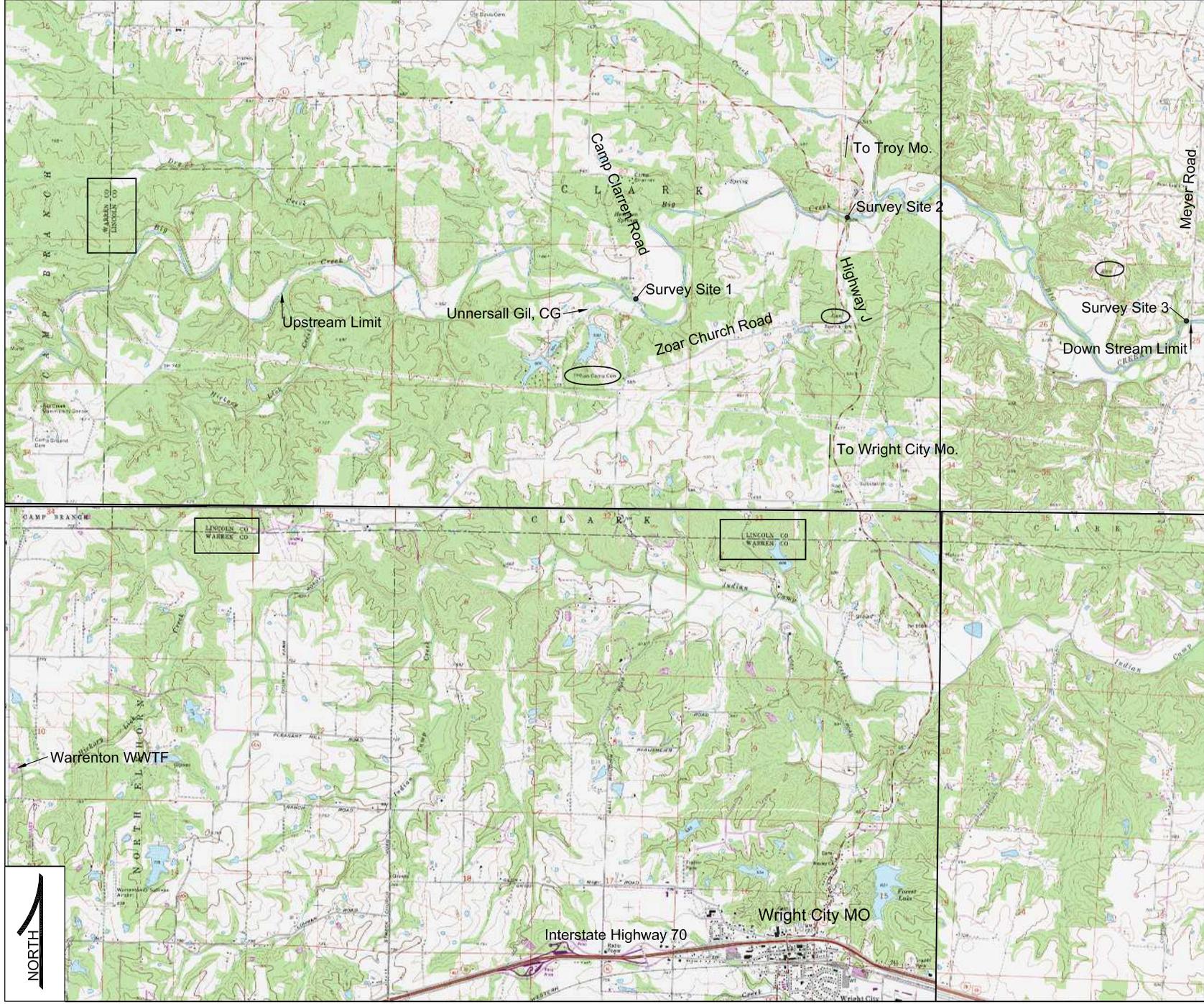
Address: Phone: (636) 397-1211  
 333 Mid Rivers Mall Drive Fax: (636) 397-1104  
 St. Peters, Missouri 63376 Website: www.prs3.com

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WBID #: 0207  
 Name: Big Creek  
 GIS MAP

NOT TO SCALE

PRJ Job Number: 07031.MODN.00E  
 Drawn By: M.C. Date: 05-24-07  
 Checked By: J.V. Date: 05-24-07



**PICKETT RAY & SILVER**  
 Civil Engineers Land Surveyors Natural Resources  
 Address: Phone: (636) 397-1211  
 333 Mid Rivers Mall Drive Fax: (636) 397-1104  
 St. Peters, Missouri 63376 Website: www.prs3.com  
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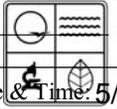
WBID #: 0207  
 Name: Big Creek  
 County: Lincoln/Warren  
 USGS Location Map

NOT TO SCALE  
 PRS Job Number: 07031.MODN.00E  
 Drawn By: M.C. Date: 05-24-07  
 Checked By: J.V. Date: 05-24-07

WBID# 0207

**Field Data Sheets for Recreational Use Stream Surveys**

Site# 1



**Missouri  
Department of  
Natural Resources**

**Data Sheet B - Site Characterization**

(must be completed for each site)

Date & Time: 5/13/2013	Site Location Description (e.g., road crossing): <b>Big Creek Rd./Camp Charren Rd.</b>
Personnel (Data Collectors): <b>Renee Martin</b>	Facility Name: <b>Warrenton WWTP</b>
Current Weather Conditions: <b>Clear</b>	Permit Number: <b>MO 0087912</b>
Weather Conditions for Past 10 days: <b>Unknown</b>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input checked="" type="checkbox"/>	

**Site Locations:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <b>0669797</b>	Y: <b>4307216</b>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode <input checked="" type="checkbox"/>	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other Real Time Differential Correction with
Real Time Differential Processing	Post Processing
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± <u>17</u> Feet or ± _____ Meters	
PDOP _____	

**Photos:**

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<b>See Attached Photos</b>		0207-1-79 0207-1-80 0207-1-81	Upstream Site #1, Transect #1 Downstream Site #1, Transect #1 Tracks @ Site #1	0207-1-82	Footprints @ Site #1

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:

Comments: **Power lines cross Big Creek**

**Indications of Human Use\*:** (attach photos)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input checked="" type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	
Comments:					

**Stream Morphology:**



Missouri Department of Natural Resources

Upstream View's Physical Dimensions: Is there any water present at this view?  Yes  No  
 If so, is there an obvious current?  Yes  No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view?  Yes  No

If so, is there an obvious current?  Yes  No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Substrate\*: (These values should add up to 100%.)

- % Cobble	20 % Gravel	80 % Sand	- % Silt	- % Mud/Clay	- % Bedrock
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Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site)

None present

Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

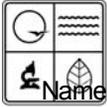
Comments: Please attach any additional comments () to this form.

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Renee Martin Date of Survey: 5/14/07

Organization: AE Solutions Position: Env. Specialist



Missouri  
Department of  
Natural Resources

Site Name: Big Creek

WBID: 207 Site # 1

DO 10.18 mg/L  
Water Temp 24 °C

Transect Cross-Section																						
1		2		3		4		5		6		7		8		9		10		11		
Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	
1	1.00	0.10	0.00	0.10	0.50	0.10	1.00	0.10	1.50	0.10	0.60	0.10	0.60	0.10	0.30	0.10	0.00	0.10	0.00	0.20	0.00	0.20
2	2.50	0.10	1.10	0.40	1.70	0.40	2.20	0.20	2.60	0.20	2.20	0.50	2.30	0.20	1.80	0.10	1.60	0.50	0.90	0.80	1.50	0.55
3	4.00	0.20	2.20	0.30	2.90	0.50	3.40	0.20	3.70	0.20	3.80	1.00	4.00	0.40	3.30	0.10	2.40	0.70	1.80	1.00	3.00	0.50
4	5.50	0.20	3.30	0.80	4.10	0.60	4.60	0.20	4.80	0.30	5.40	0.50	5.70	0.40	4.80	0.10	3.20	0.50	2.70	1.00	4.50	0.60
5	7.00	0.20	4.40	0.80	5.30	0.60	5.80	0.20	5.90	0.30	7.00	0.50	7.40	0.50	6.30	0.10	4.00	0.40	3.60	1.00	6.00	0.60
6	8.50	0.20	5.50	0.60	6.50	0.60	7.00	0.20	7.00	0.30	8.60	0.40	9.10	0.60	7.80	0.10	4.80	0.70	4.50	1.00	7.50	0.60
7	10.00	0.20	6.60	0.50	7.70	0.50	8.20	0.15	8.10	0.40	10.20	0.80	10.80	0.70	9.30	0.10	5.60	0.55	5.40	0.90	9.00	0.50
8	11.50	0.20	7.70	0.40	8.90	0.50	9.40	0.10	9.20	0.50	11.80	0.70	12.50	0.80	10.80	0.20	6.40	0.40	6.30	0.60	10.50	0.40
9	13.00	0.15	8.80	0.30	10.10	0.40	10.60	0.10	10.30	0.50	13.40	0.25	14.20	1.00	12.30	0.20	7.20	0.30	7.20	0.40	12.00	0.30
10	14.50	0.10	9.90	0.20	11.30	0.20	11.80	0.10	11.40	0.40	15.00	0.30	15.90	1.00	13.80	0.15	8.00	0.30	8.10	0.20	13.50	0.20
11	16.00	0.10	11.00	0.10	12.50	0.10	13.00	0.10	12.50	0.10	16.60	0.10	17.60	0.80	15.30	0.10	10.00	0.10	9.00	0.10	15.00	0.10

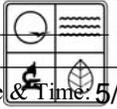
Site Maximum 1.00

Site Median 0.30

WBID# 0207

**Field Data Sheets for Recreational Use Stream Surveys**

Site# 2



**Missouri  
Department of  
Natural Resources**

**Data Sheet B - Site Characterization**

(must be completed for each site)

Date & Time: 5/14/14	Site Location Description (e.g., road crossing): <b>Hwy. J Bridge Crossing</b>
Personnel (Data Collectors): <b>Renee Martin</b>	Facility Name: <b>Warrenton WWTP</b>
Current Weather Conditions: <b>Clear/Hot</b>	Permit Number: <b>MO 0087912</b>
Weather Conditions for Past 10 days: <b>Unknown</b>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input checked="" type="checkbox"/>	

**Site Locations:**

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <b>0672343</b>	Y: <b>4308166</b>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode <input checked="" type="checkbox"/>	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other Real Time Differential Correction with
Real Time Differential Processing	Post Processing
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± <u>19</u> Feet or ± _____ Meters	
PDOP _____	

**Photos:**

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<b>See Attached Photos</b>		0207-2-84 0207-2-85	Upstream Site #2, Transect #1 Downstream Site #2, Transect #1	0207-2-86	Tire Tracks & Cut Pine trees near bridge @ Site 2

**Uses Observed\*:** (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:

Comments: **Wide gravel bar which shows vehicle tracks, someone placed cut trees in creek below bridge.**

**Indications of Human Use\*:** (attach photos)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input checked="" type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	

Comments: **Tree dumping under Hwy. J Bridge**

**Stream Morphology:**



Upstream View's Physical Dimensions: Is there any water present at this view?  Yes  No  
 If so, is there an obvious current?  Yes  No

Select one of the following **channel features**:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view?  Yes  No

If so, is there an obvious current?  Yes  No

Select one of the following **channel features**:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

**Substrate\***: (These values should add up to 100%.)

- % Cobble	5 % Gravel	95 % Sand	- % Silt	- % Mud/Clay	- % Bedrock
------------	------------	-----------	----------	--------------	-------------

**Aquatic Vegetation\***: (Note amount of vegetation or algal growth at the assessment site)

None

**Water Characteristics\***: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

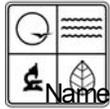
**Comments:** Please attach any additional comments () to this form.

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: Renee Martin Date of Survey: 5/14/07

Organization: AE Solutions Position: Env. Specialist



Missouri  
Department of  
Natural Resources

Site Name: Big Creek

WBID: 207 Site # 2

DO 9.58 mg/L  
Water Temp 25.9 °C

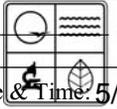
Transect Cross-Section																						
	1		2		3		4		5		6		7		8		9		10		11	
	Distance (m)	Depth (m)																				
1	0.40	0.10	0.90	0.10	1.00	0.10	1.40	0.10	1.70	0.10	0.90	0.10	2.00	0.10	2.20	0.10	2.60	0.10	0.30	0.10	1.50	0.10
2	1.30	0.30	1.90	0.10	1.60	0.20	2.10	0.20	2.60	0.10	2.20	0.10	3.00	0.10	3.30	0.10	3.60	0.10	2.30	0.00	2.70	0.10
3	2.20	0.50	2.90	0.20	2.20	0.15	2.80	0.20	3.50	0.20	3.50	0.20	4.00	0.10	4.40	0.10	4.60	0.10	4.30	0.00	3.90	0.00
4	3.10	0.50	3.90	0.20	2.80	0.20	3.50	0.20	4.40	0.20	4.80	0.25	5.00	0.10	5.50	0.10	5.60	0.20	6.30	0.10	5.10	0.00
5	4.00	0.40	4.90	0.10	3.40	0.20	4.20	0.20	5.30	0.20	6.10	0.35	6.00	0.10	6.60	0.10	6.60	0.20	8.30	0.10	6.30	0.00
6	4.90	0.45	5.90	0.10	4.00	0.20	4.90	0.25	6.20	0.30	7.40	0.10	7.00	0.10	7.70	0.20	7.60	0.20	10.30	0.10	7.50	0.00
7	5.80	0.45	6.90	0.10	4.60	0.20	5.60	0.30	7.10	0.30	8.70	0.20	8.00	0.35	8.80	0.20	8.60	0.20	12.30	0.11	8.70	0.10
8	6.70	0.40	7.90	0.10	5.20	0.20	6.30	0.30	8.00	0.30	10.00	0.20	9.00	0.40	9.90	0.20	9.60	0.20	14.30	0.10	9.90	0.15
9	7.60	0.30	8.90	0.10	5.80	0.20	7.00	0.20	8.90	0.30	11.30	0.10	10.00	0.60	10.00	0.25	10.60	0.30	16.30	0.20	11.10	0.30
10	8.50	0.40	9.90	0.10	6.40	0.20	7.70	0.20	9.80	0.40	12.60	0.20	11.00	0.60	12.10	0.20	11.60	0.30	18.30	0.20	12.30	0.50
11	9.40	0.40	10.90	0.10	7.00	0.10	8.40	0.10	10.70	0.40	13.90	0.10	12.00	0.10	13.20	0.10	12.60	0.20	20.30	0.10	13.50	0.85

Site Maximum 0.85

Site Median 0.20

WBID# 0207

Site# 3



Missouri  
Department of  
Natural Resources

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(must be completed for each site)

Date & Time: 5/1/2014	Site Location Description (e.g., road crossing): <b>Co Rd. 729/Meyer Rd. Bridge Crossing</b>
Personnel (Data Collectors): <b>Renee Martin</b>	Facility Name: <b>Warrenton WWTP</b>
Current Weather Conditions: <b>Clear</b>	Permit Number: <b>MO 0087912</b>
Weather Conditions for Past 10 days: <b>Unknown</b>	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input checked="" type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <b>0676333</b>	Y: <b>4307033</b>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode <input checked="" type="checkbox"/>	Topographic Map or DRG
Dynamic Mode (Kinematic) <input type="checkbox"/>	Aerial Photograph or DOQQ
Precise Positioning Service <input type="checkbox"/>	Satellite Imagery
Signal Averaging <input type="checkbox"/>	Interpolation Other Real Time Differential Correction with <input type="checkbox"/>
Real Time Differential Processing <input type="checkbox"/>	Post Processing
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± <u>24</u> Feet or ± _____ Meters	
PDOP _____	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<b>See Attached Photos</b>		0207-3-87 0207-3-88	Upstream Site #3, Transect #1 Downstream @ Site #3, Transect #1	0207--3-89 0207-3- 90	Footprints @ Site #3, Transect #1 House nearby Site #3, Transect #1

Uses Observed\*: (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

Surrounding Conditions\*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:
Comments: <b>Home nearby Transect #1</b>				

Indications of Human Use\*: (attach photos)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input checked="" type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input checked="" type="checkbox"/> Other:	
Comments: <b>Human use under bridge - footpath</b>					

**Stream Morphology:**



Upstream View Department of Natural Resources: Is there any water present at this view?  Yes  No  
 If so, is there an obvious current?  Yes  No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view?  Yes  No  
 If so, is there an obvious current?  Yes  No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

**Substrate\*:** (These values should add up to 100%.)

- % Cobble	- % Gravel	100 % Sand	- % Silt	- % Mud/Clay	- % Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

Little algae on substrate

**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

**Comments:** Please attach any additional comments () to this form.

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: Renee Martin Date of Survey: 5/14/07

Organization: AE Solutions Position: Env. Specialist



Missouri  
Department of

Name

Natural Resources

WBID: 207

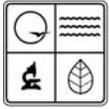
Site# 3

DO 9.33 mg/L  
Water Temp 26.6 °C

Transect Cross-Section																					
1		2		3		4		5		6		7		8		9		10		11	
Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
0.00	0.10	0.10	0.10	1.30	0.10	0.40	0.10	0.50	0.10	0.60	0.10	1.00	0.10	1.10	0.10	0.30	0.10	1.10	0.10	1.30	0.10
2.00	0.30	1.60	0.40	2.90	0.20	1.20	0.20	1.30	0.20	2.10	0.20	2.22	0.25	1.80	0.20	1.40	0.25	2.30	0.20	2.50	0.30
4.00	0.50	3.10	0.80	4.50	0.20	2.00	0.20	2.10	0.30	4.60	0.10	3.40	0.20	2.50	0.25	2.50	0.40	3.50	0.40	3.70	0.30
6.00	0.50	4.60	1.00	6.10	0.20	2.80	0.25	2.90	0.30	6.10	0.20	4.60	0.20	3.20	0.30	3.60	0.50	4.70	0.40	4.90	0.50
8.00	0.70	6.10	1.00	7.70	0.25	3.60	0.30	3.70	0.20	7.60	0.10	5.80	0.30	3.90	0.40	4.70	0.45	5.90	0.40	6.10	0.60
10.00	0.80	7.60	1.00	9.30	0.30	4.40	0.30	4.50	0.20	9.10	0.10	7.00	0.30	4.60	0.40	5.80	0.50	7.10	0.40	7.30	0.40
12.00	1.00	9.10	1.00	10.90	0.30	5.20	0.20	5.30	0.20	10.60	0.20	8.20	0.35	5.30	0.40	6.90	0.40	8.30	0.30	8.50	0.30
14.00	1.00	10.60	1.00	12.50	0.40	6.80	0.15	6.10	0.20	12.10	0.10	9.40	0.40	6.00	0.40	8.00	0.40	9.50	0.30	9.70	0.30
16.00	1.00	12.10	1.00	14.10	0.40	7.60	0.10	6.90	0.20	13.60	0.10	10.60	0.40	6.70	0.40	9.10	0.30	10.70	0.30	10.90	0.20
18.00	1.00	13.60	1.00	15.70	0.50	8.40	0.10	7.70	0.10	15.10	0.20	11.80	0.40	7.40	0.30	10.20	0.20	11.90	0.20	12.10	0.10
20.00	1.00	15.10	0.60	17.30	0.20	9.20	0.10	8.50	0.10	16.60	0.10	13.00	0.10	8.10	0.10	11.30	0.10	13.10	0.10	13.30	0.10

Site Maximum 1.00

Site Median 0.30



Miss  
Dep  
Natu



1. Upstream Site 1, Transect 1



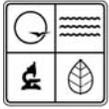
2. Downstream Site 1, Transect 1



3. Tracks at Site 1



4. Footprints at Site 1



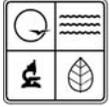
Miss  
Dep  
Natu



5. Upstream Site 2, Transect 1



6. Downstream Site 2, Transect 1



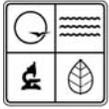
Mississippi  
Department of  
Natural Resources



7. Tire tracks and cut pine trees near bridge at Site 2



8. Upstream Site 3, Transect 1



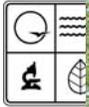
Miss  
Dep  
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9. Downstream at Site 3, Transect 1



10. Footprints at Site 3, Transect 1



11. Home near Site 3, Transect 1