

Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1727 Buck Creek

Submitted by

Pickett Ray and Silver

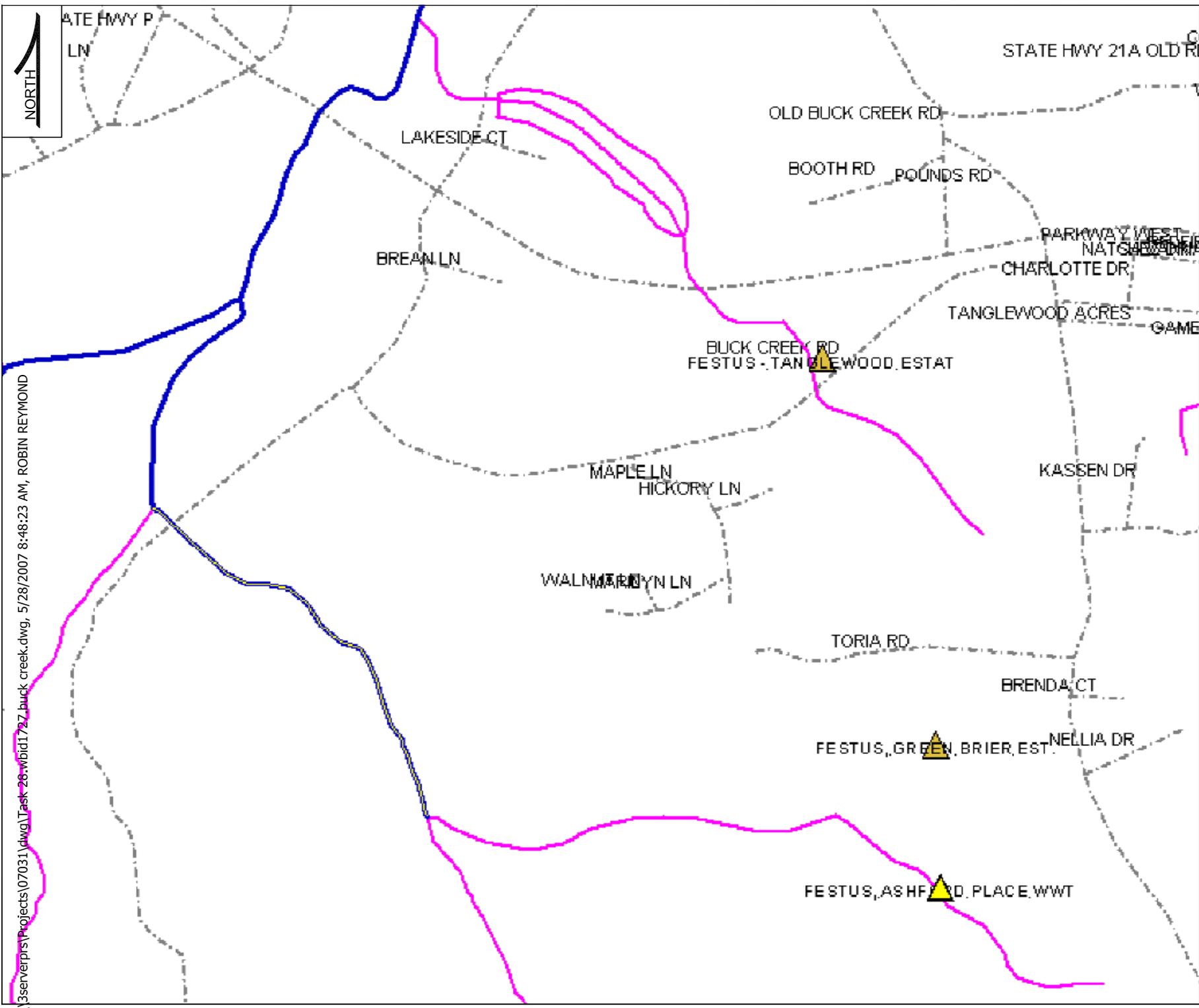
To

Missouri Department of Natural Resources

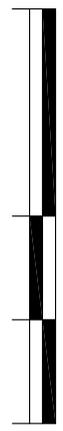
Water Protection Program

Date Received: June 5, 2007

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STATE HWY 21A OLD R LN

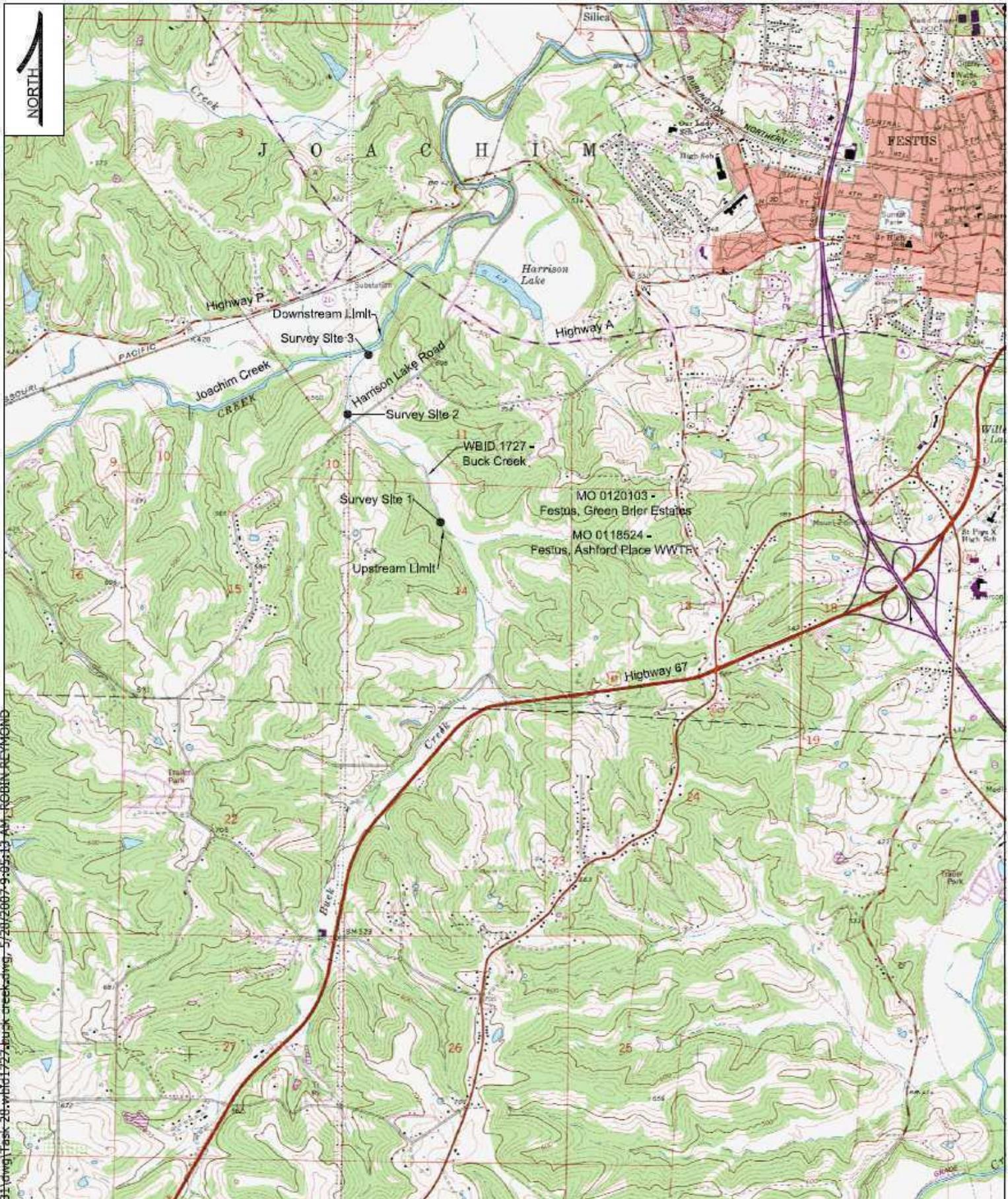


GRAPHIC SCALE
Not to Scale

PRS Job Number: 07031.MODN.00E
 Drawn By: RLR Date: 05-28-07
 Checked By: JCV Date: 05-28-07

WBID #: 1727
 Name: Buck Creek
 County: Jefferson
 GIS Map

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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PICKETT RAY & SILVER

Civil Engineers Land Surveyors Natural Resources

Address: 333 Mid Rivers Mall Drive
 St. Peters, Missouri 63376

Phone: (636) 397-1211
 Fax: (636) 397-1104
 Website: www.prs3.com

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WBID #: 1727
 Name: Buck Creek
 County: Jefferson
 USGS Location Map



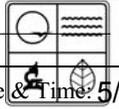
GRAPHIC SCALE
 Not to Scale

PRS Job Number: 07031.MODN.00E
 Drawn By: RLR Date: 05-28-07
 Checked By: JCV Date: 05-28-07

WBID# 1727

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: 5/14/12	Site Location Description (e.g., road crossing): upstream of Harrison Lake Rd. bridge
Personnel (Data Collectors): PRS - RR/MC	Facility Name: Festus, Green Brier Estates, Ashford Place WWTF
Current Weather Conditions: p. sunny 75°F	Permit Number: MO 0120103, MO 0118524
Weather Conditions for Past 10 days: sun	

Drought Conditions?: No drought ; Phase I ; Phase II ; Phase III ; Phase IV ; Unknown

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 723967.775m		Y: 4231809.598m	
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 Correction with	x
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	± _____ Feet or ± _____ Meters		
PDOP	5.4		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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 *Data Sheet D- Recreational Use Interview* 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 type="checkbox"/> Other:

Comments:

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input checked="" 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 type="checkbox"/> Other:	

Comments:

* Page Two – Data Sheet B for WBID # 1727-1 :

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

Approximate percentage of channel features for entire segment site 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 10%					
RUN 50%					
POOL 40%					

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

15 % Cobble	40 % Gravel	10 % Sand	10 % Silt	10 % Mud/Clay	15 % Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

moderate moss/algae growth on rock substrate.

Water Characteristics*: (Mark all that apply.)

Odor:	<input checked="" type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: livestock waste
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green murky	<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 checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

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

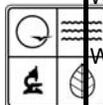
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions 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: Robin Reymond Date of Survey: 5/22/07

Organization: Pickett, Ray & Silver, Inc. Position: _____

Recreational Use Attainability Analysis Field Survey Sheet



Waterbody ID: 1727 Site #: 1
 Missouri Department of Natural Resources
 Weather Conditions: D, sunny 78°F
 GPS Location: 723967.755m UTM X: 4231809.598m UTM Y:
 Horizontal Accuracy Estimate (GPS Data Quality): +/- N/A (feet) PDOP: 5.4
 Average Stream Width: 6.2 (meters) Length of Survey Segment: 150 (meters)
 Field Staff: PRS - RR/MC

Dissolved Oxygen	
Dissolved Oxygen:	<u>8.86</u> (mg/L)
Dissolved Oxygen:	_____ (% sat)
Specific Cond:	_____ (µS/cm)
Water Temperature:	<u>18.6</u> (°C)

Transect Cross-Section

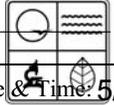
	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
1	0.1	.10	0	>1	1.5	.10	1.0	.10	0	>1	0	>1	0	>1	0	.02	0.2	.10	0.3	.10	0.5	.10
2	.49	.15		>1	1.97	.13	1.8	.15		>1		>1		>1	.58	.03	.62	.25	.75	.10	0.9	.13
3	.88	.20		>1	2.44	.13	2.6	.20		>1		>1		>1	1.16	.05	1.04	.37	1.2	.14	1.3	.15
4	1.27	.25		>1	2.91	.16	3.4	.33		>1		>1		>1	1.74	.02	1.46	.60	1.65	.25	1.7	.18
5	1.66	.23		>1	3.38	.20	4.2	.41		>1		>1		>1	2.32	.00	1.88	.61	2.1	.34	2.1	.21
6	2.05	.21		>1	3.85	.17	5.0	.52		>1		>1		>1	2.90	.01	2.3	.54	2.55	.40	2.5	.16
7	2.44	.15		>1	4.32	.19	5.8	.65		>1		>1		>1	3.48	.02	2.72	.51	3.0	.40	2.9	.05
8	2.83	.17		>1	4.79	.16	6.6	.60		>1		>1		>1	4.06	.00	3.14	.35	3.45	.40	3.3	.13
9	3.22	.15		>1	5.26	.13	7.4	.51		>1		>1		>1	4.64	.01	3.56	.36	3.9	.33	3.7	.10
10	3.61	.10	8.0	>1	5.73	.10	8.2	.34	7.0	>1	7.5	>1	5.0	>1	5.2	.02	3.98	.24	4.35	.15	4.1	.10
11	4.0	.10			6.2	.11	9.0	.10									4.4	.10	4.8	.10	4.5	.10
Width/Median Depth	5.0	.15	8.0		6.5	.13	9.0	.34	7.0		7.5		5.0		5.2	.02	4.5	.36	5.0	.25	5.0	.13
Feature Type (riffle, run, or pool)	Run		Pool		Run		Run		Pool		Pool		Pool		Riffle		Run		Run		Run	

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/22/07

WBID# 1727

Site# 2



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: 5/11/2017	Site Location Description (e.g., road crossing): near Harrison Lake Road bridge
Personnel (Data Collectors): PRS - RR/MC	Facility Name: Festus, Green Brier Estates, Ashford Place WWTF
Current Weather Conditions: p. sunny 75°F	Permit Number: MO 0120103, MO 0118524
Weather Conditions for Past 10 days: sun	

Drought Conditions?: No drought ; Phase I ; Phase II ; Phase III ; Phase IV ; Unknown

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 723775.583m		Y: 4231885.221m	
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 Correction with	X
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	± _____ Feet or ± _____ Meters		
PDOP	3.9		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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 *Data Sheet D- Recreational Use Interview* 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 type="checkbox"/> Other:

Comments:

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input checked="" 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 type="checkbox"/> Other:	

Comments:

* Page Two – Data Sheet B for WBID # 1727-2 :

Stream Morphology:



Upstream View: 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

Approximate percentage of channel features for entire segment site 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 10%					
RUN 90%					
POOL					

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

15 % Cobble	35 % Gravel	15 % Sand	5 % Silt	15 % Mud/Clay	15 % Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

moderate moss/algae growth on rock substrate. Gravel bars 40-50% vegetated.

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: livestock waste
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: brownish murky
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 checked="" type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

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

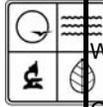
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions 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: Robin Reymond Date of Survey: 5/22/07

Organization: Pickett, Ray & Silver, Inc. Position: _____

Recreational Use Attainability Analysis Field Survey Sheet



Waterbody ID: 1727 Site #: 2
 Missouri Department of Natural Resources
 Weather Condition: cloudy 75°F
 GPS Location: 723775.583m UTM X: 4231885.221m UTM Y:
 Horizontal Accuracy Estimate (GPS Data Quality): +/- N/A (feet) PDOP: 3.9
 Average Stream Width: 5.2 (meters) Length of Survey Segment: 150 (meters)
 Field Staff: PRS - RR/MC

Dissolved Oxygen	
Dissolved Oxygen:	<u>9.17</u> (mg/L)
Dissolved Oxygen:	_____ (% sat)
Specific Cond:	_____ (µS/cm)
Water Temperature:	<u>17.7</u> (°C)

Transect Cross-Section

	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
1	0	.01	0.3	.10	0	.03	1.0	.10	0	.05	0	.10	1.0	.10	0.6	.10	0	.10	.10	.10	.10	.10
2	0.5	.03	.77	.10	.55	.01	1.87	.15	.39	.05	.39	.13	1.4	.12	.92	.16	.46	.30	.62	.16	.49	.10
3	1.0	.02	1.24	.11	1.1	.02	2.74	.14	.78	.01	.78	.11	1.8	.16	1.24	.31	.92	.36	1.14	.31	.88	.13
4	1.5	.04	1.71	.14	1.65	.00	3.61	.13	1.17	.01	1.17	.10	2.2	.18	1.56	.38	1.38	.36	1.66	.39	1.27	.17
5	2.0	.10	2.18	.13	2.2	.01	4.48	.19	1.56	.02	1.56	.11	2.6	.15	1.88	.36	1.84	.35	2.18	.35	1.66	.23
6	2.5	.08	2.65	.13	2.75	.05	5.35	.20	1.95	.02	1.95	.10	3.0	.13	2.2	.45	2.3	.30	2.7	.30	2.05	.24
7	3.0	.10	3.12	.15	3.3	.01	6.22	.20	2.34	.00	2.34	.10	3.4	.14	2.52	.41	2.76	.25	3.22	.28	2.44	.28
8	3.5	.10	3.59	.14	3.85	.05	7.09	.15	2.73	.05	2.73	.10	3.8	.13	2.84	.20	3.22	.25	3.74	.29	2.83	.23
9	4.0	.09	4.06	.11	4.4	.04	7.96	.14	3.12	.03	3.12	.10	4.2	.10	3.16	.16	3.68	.10	4.26	.24	3.22	.25
10	4.5	.05	4.53	.10	5.0	.02	8.83	.10	3.5	.01	3.25	.10	4.6	.14	3.48	.16	4.14	.15	4.78	.15	3.61	.10
11			5.0	.10			9.7	.10			3.5	.10	5.0	.10	3.8	.10	4.6	.10	5.3	.10	4.0	.10
Width/Median Depth	4.5	.08	5.5	.11	5.0	.02	9.7	.14	3.5	.02	4.5	.10	5.4	.13	4.0	.20	5.0	.25	5.8	.28	4.7	.17
Feature Type (riffle, run, or pool)	Riffle		Run		Riffle		Run															

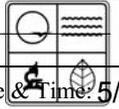
Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/22/07

WBID# 1727

Site# 3

Field Data Sheets for Recreational Use Stream Surveys



**Missouri
Department of
Natural Resources**

Data Sheet B - Site Characterization

(must be completed for each site)

Date & Time: 5/14/07	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): PRS - RR/MC	just upstream of confluence with Joachim
Current Weather Conditions: p. sunny 75°F	Facility Name: Festus, Green Brier Estates, Ashford Place WWTF
Weather Conditions for Past 10 days: sun	Permit Number: MO 0120103, MO 0118524
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 723651.401m		Y: 4232026.473m	
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 Correction with	X
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	± _____ Feet or ± _____ Meters		
PDOP	2.7		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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 type="checkbox"/> Other:
Comments:				

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input checked="" type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input checked="" 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 type="checkbox"/> Other:	
Comments:					

* Page Two – Data Sheet B for WBID # 1727-3 :

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

Approximate percentage of channel features for entire segment site 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 5%					
RUN 90%					
POOL 5%					

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

% Cobble	40	% Gravel	10	% Sand	10	% Silt	40	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

moderate moss/algae growth. Gravel bars 50% vegetated.

Water Characteristics*: (Mark all that apply.)

Odor:	<input checked="" type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: livestock waste
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: brownish murky
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 checked="" type="checkbox"/> Scum	<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

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

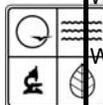
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions 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: Robin Reymond Date of Survey: 5/22/07

Organization: Pickett, Ray & Silver, Inc. Position: _____

Recreational Use Attainability Analysis Field Survey Sheet



Waterbody ID: 1727 Site #: 3
 Missouri Department of Natural Resources
 Weather Condition: cloudy 75°F
 GPS Location: 723651.401m UTM X: 4232026.473 UTM Y:
 Horizontal Accuracy Estimate (GPS Data Quality): +/- N/A (feet) PDOP: 2.7
 Average Stream Width: 5.9 (meters) Length of Survey Segment: 150 (meters)
 Field Staff: PRS - RR/MC

Dissolved Oxygen	
Dissolved Oxygen:	<u>11.30</u> (mg/L)
Dissolved Oxygen:	_____ (% sat)
Specific Cond:	_____ (µS/cm)
Water Temperature:	<u>18.8</u> (°C)

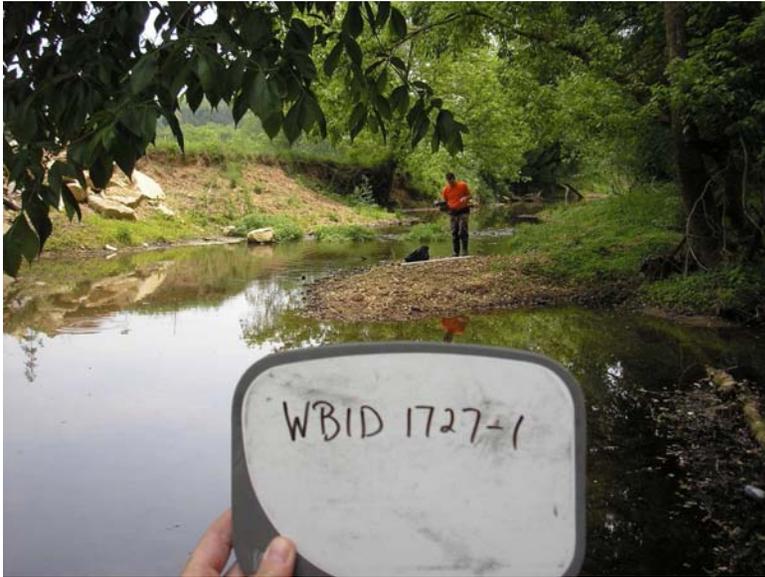
Transect Cross-Section

	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
1	0.3	0.10	0.3	.10	0.2	.10	1.8	.10	1.0	.10	0	.05	0.3	.10	1.0	.10	0.6	.10	0.3	.10	0.1	.10
2	.87	.21	.97	.20	.85	.20	2.15	.12	1.45	.13	.67	.07	.62	.20	1.12	.10	1.04	.15	0.9	.19	1.1	.21
3	1.44	.33	1.64	.25	1.5	.33	2.5	.15	1.9	.23	1.34	.06	.94	.29	1.24	.11	1.48	.23	1.5	.21	2.1	.24
4	2.01	.40	2.31	.43	2.15	.44	2.85	.20	2.35	.18	2.01	.07	1.26	.36	1.36	.14	1.92	.21	2.1	.29	3.1	.17
5	2.58	.45	2.98	.61	2.8	.46	3.2	.20	2.8	.20	2.68	.05	1.58	.39	1.48	.10	2.36	.16	2.7	.32	4.1	.14
6	3.15	.48	3.65	.67	3.45	.41	3.55	.14	3.25	.20	3.35	.05	1.9	.34	1.6	.12	2.8	.20	3.3	.34	5.1	.10
7	3.72	.50	4.32	.72	4.1	.33	3.9	.14	3.7	.21	4.02	.05	2.22	.35	1.72	.19	3.24	.23	3.9	.41	6.1	.10
8	4.29	.44	4.99	.64	4.75	.30	4.25	.13	4.15	.26	4.69	.00	2.54	.28	1.84	.20	3.68	.24	4.5	.39	7.1	.11
9	4.86	.38	5.66	.53	5.4	.25	4.6	.12	4.6	.16	5.36	.05	2.86	.20	1.96	.25	4.12	.31	5.1	.32	8.1	.13
10	5.43	.23	6.33	.31	6.05	.20	4.95	.10	5.05	.14	6.0	.09	3.18	.13	2.08	.21	4.56	.32	5.7	.30	9.1	.15
11	6.0	.13	7.0	.10	6.7	.10	5.3	.10	5.5	.10			3.5	.10	2.2	.15	5.0	.33	6.3	.30	10.0	.10
Width/Median Depth	6.0	.38	7.5	.43	7.0	.30	5.3	.13	5.6	.18	6.0	.05	3.5	.29	2.5	.14	5.0	.24	6.3	.30	10.1	.13
Feature Type (riffle, run, or pool)	Run		Riffle		Run																	

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/22/07

WBID# 1727



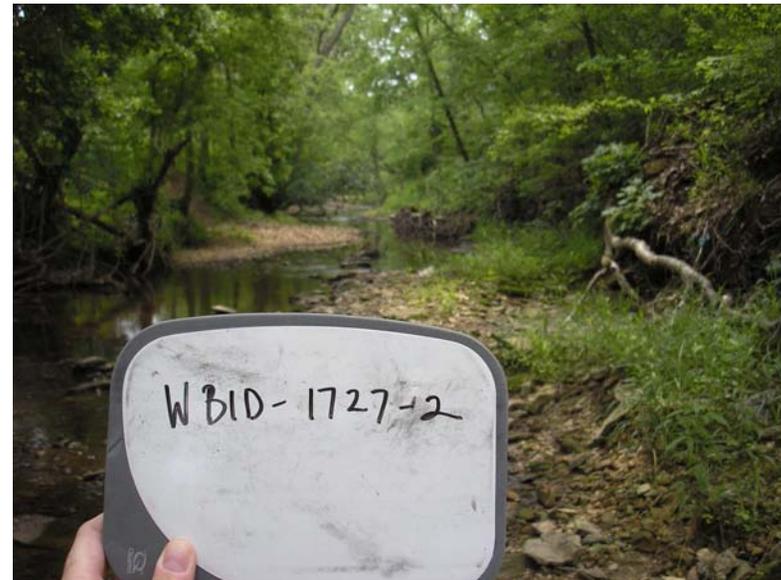
WBID 1727 – Site 1 – Transect 1 – facing upstream.



WBID 1727 – Site 1 – Transect 1 – facing downstream.



WBID 1727 – between Sites 1 and 2 – livestock tracks.



WBID 1727 – Site 2 – Transect 1 – facing upstream.

WBID# 1727



WBID 1727 – Site 2 – Transect 1 – facing downstream.



WBID 1727 – Site 3 – Transect 1 – facing upstream.



WBID 1727 – Site 3 – Transect 1 – facing downstream.