



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1307 Gillum Creek

Submitted by
BWR

to

Missouri Department of Natural Resources
Water Protection Program

Date received: June 1, 2007

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

I. Water Body Information (For water body being surveyed)

Water Body Name (from USGS 7.5' quad):	Gillum Creek
Missouri Water Body Identification (WBID) Number:	1307
8-digit HUC:	102 90102
County:	Bates
Upstream Legal Description (from Table H):	mouth
Downstream Legal Description (from Table H):	23,39N, 33W
Number of sites evaluated	3
List all sites numbers, listed consequently upstream to downstream:	1, 2, 3

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

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:	
UTM X	UTM Y	UTM X	UTM Y
78.145	094.52629	78.15977	094.51954
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	

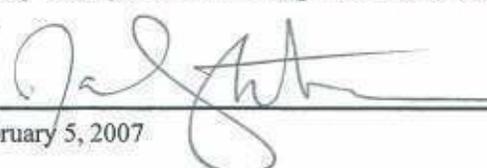
III. Discharger Facility Information (list all permitted dischargers on the stream)

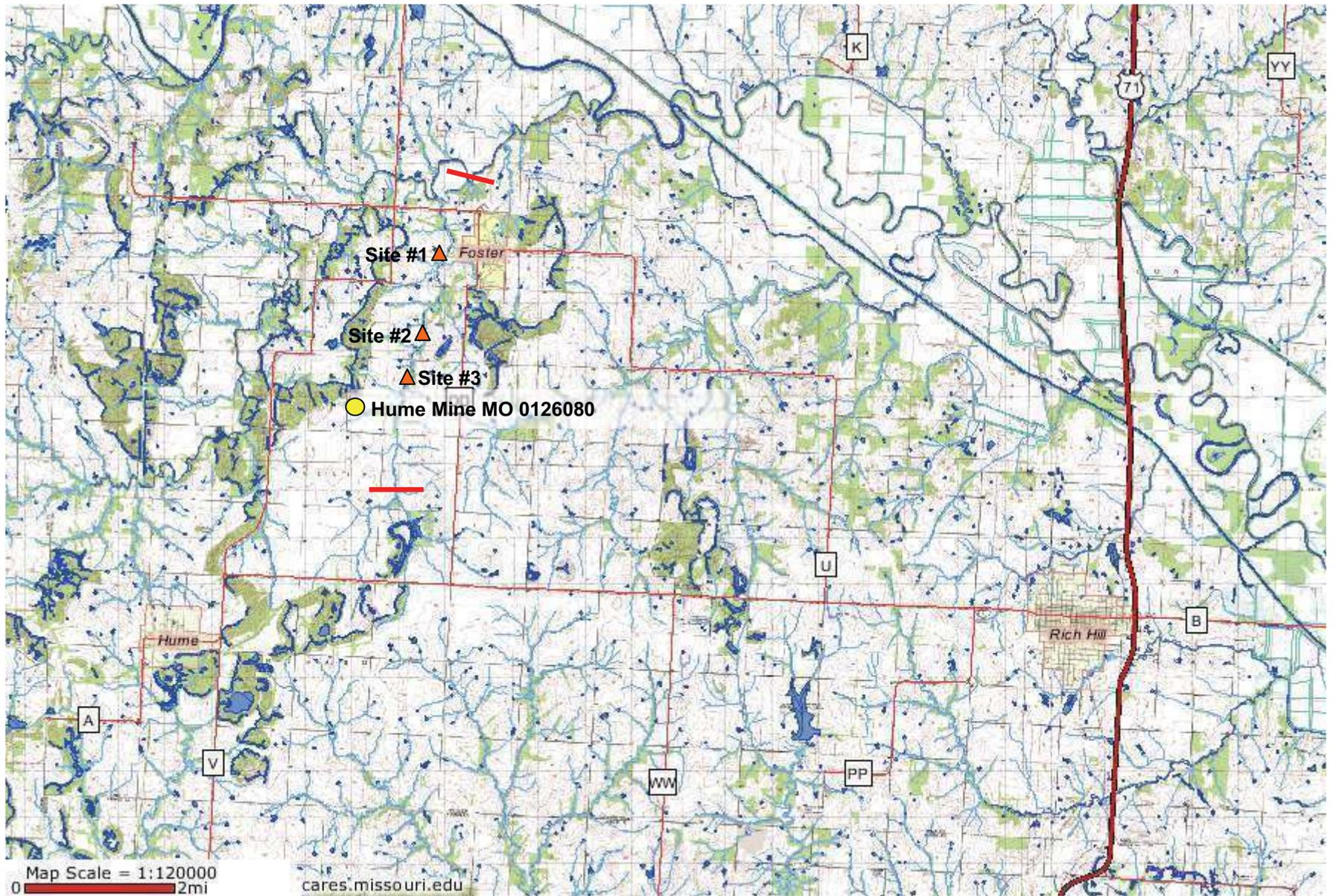
Discharger Facility Name(s):	Hume Mine
Discharger Permit Number(s):	MO 0126080

IV. UAA Surveyor (please print legibly)

Name of Surveyor	Mark Griffith	Telephone Number:	(816) 303-2696
Organization/Employer:	BARR EAE		
Position:	Environmental Scientist		

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

Signed:  Date: 5/18/07



Gillum Creek
WBID #1307



WBID# 1307
 Site# 1

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>3:30 5/18/07</u>	Site Location Description (e.g., road crossing): <u>N. of County Roads 5508 to 5507 4508</u>
Personnel (Data Collectors): <u>Mark & Jon</u>	Facility Name: <u>Hume Mine</u>
Current Weather Conditions: <u>Sunny 75°F</u>	Permit Number: <u>MD 0126080</u>
Weather Conditions for Past 10 days:	
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: <u>38.15977</u>	Y: <u>094.51954</u>
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 _____ ± _____ Feet or ± _____ Meters
EPE ± <u>20</u> Feet or ± _____ Meters	
PDOP	

Photos:

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

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: <u>Cattle</u>

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 checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Comments: Private Property → Cattle Pasture

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 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: Private Property → Cattle Pasture

* Page Two – Data Sheet B for WBID # 1307 : Site #1
 Stream Morphology:

% Channel Feature
 RUN = 70%
 RIFFLE = 30%
 POOL = 0%

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	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock

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

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 type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>Brown</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" 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: [Signature] Date of Survey: 5/18/07

Organization: BWR Position: Field Team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307

Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A Start on Right	1 wetted width	0.1 (0.2)		1	Channel Feature:
	2 7.0 m	0.6		2	run
	3	0.6		3	
	4 measurements	0.7		4	Dissolved Oxygen
	5 0.7 m	0.7	12.5 ppm	5	
	6 apart	0.6		6	12.5 ppm
	7	0.5		7	ppm
	8	0.4		8	%
	9	0.2		9	
	10	0.1		10	
Transect B	1 wetted width	0.1 (0.2)		12	Channel Feature:
	2 8.1 m	0.3		13	run
	3	0.4		14	
	4 measurements	0.5	12.3 ppm	15	Dissolved Oxygen:
	5 0.8 m	0.4		16	
	6 apart	0.3		17	12.3 ppm
	7	0.3		18	ppm
	8	0.2		19	%
	9	0.1		20	
	10	0.1		21	
Transect C	1 wetted width	0.1 (0.3)		23	Channel Feature:
	2 1.8 m	0.1		24	riffle
	3	0.1		25	
	4 measurements	0.1		26	Dissolved Oxygen
	5 0.18 m	0.1		.	
	6 apart	0.1		.	13.2 ppm
	7	0.2		.	%
	8	0.2	13.2 ppm	n	
	9	0.2			
	10	0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: Field Team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307

Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect D	wetted width	0.1 (0.2)		1	Channel Feature:
	<u>6.0 m</u>	0.3		2	run
		0.4		3	
	measurements	0.4		4	Dissolved Oxygen
	<u>0.6 m</u>	0.4		5	
	apart	(0.4)	12.9 ppm	6	12.9 ppm
		0.4		7	
		0.3		8	
		0.2		9	
		0.2		10	
Transect E	wetted width	0.1 (0.2)		12	Channel Feature:
	<u>7.8 m</u>	0.3		13	run
		(0.3)	12.4 ppm	14	
	measurements	0.2		15	Dissolved Oxygen:
	<u> m</u>	0.2		16	
	apart	0.1		17	12.4 ppm
		0.1		18	
		0.2		19	
		0.2		20	
		0.2		21	
Transect F	wetted width	0.1 (0.1)		23	Channel Feature:
	<u>11.8 m</u>	0.3		24	
		0.5		25	
	measurements	(0.6)	12.4	26	Dissolved Oxygen
	<u>1.18 m</u>	0.4		.	
	apart	0.3		.	12.4 ppm
		0.3		.	
		0.3		n	
		0.3			
		0.3			

log from
inward
down
Stream
only 12
m.
between
D & E

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature]

Date: 5/18/07

Organization: BWR

Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G	wetted width	0.1 (0.1)		1	Channel feature:
	8.0 m	0.2		2	pool/run
		0.3		3	
	measurements	0.4		4	Dissolved Oxygen
	0.8 m	0.4		5	
	apart	(0.5)	12.1 ppm	6	12.1 ppm
		0.5		7	ppm
		0.5		8	%
		0.3		9	
		0.1		10	
Transect H	wetted width	0.1 (0.3)		12	Channel Feature:
	7.5 m	0.3		13	run
		0.5		14	
	measurements	0.6		15	Dissolved Oxygen:
	0.75 m	0.6	12.3 ppm	16	
	apart	0.6		17	12.3 ppm
		0.5		18	ppm
		0.4		19	%
		0.3		20	
		0.1		21	
Transect I	wetted width	0.1 (0.1)		23	Channel Feature:
	7.8 m	0.3		24	run
		0.3		25	above riffle
	measurements	0.3		26	Dissolved Oxygen
	0.75 m	(0.3)	12.3 ppm	.	
	apart	0.2		.	12.3 ppm
		< 0.1		.	%
		0.1		n	
		0.2			
		0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect J	1 wetted width	0.1 (0.1)		1	Channel Feature:
	2 2.6 m	0.1		2	riffle
	3	0.1		3	
	4 measurements	0.1		4	Dissolved Oxygen
	5 0.2 m	(0.1)	12.8	5	
	6 apart	0.1		6	12.8 ppm
	7	0.1		7	%
	8	< 0.1		8	
	9	< 0.1		9	
	10	< 0.1		10	
Transect K	1 wetted width	0.1 (0.1)		12	Channel Feature:
	2 0.5 m	0.3		13	run
	3	0.3		14	
	4 measurements	0.3		15	Dissolved Oxygen:
	5 0.6 m	(0.3)	12.4 ppm	16	
	6 apart	0.3		17	12.4 ppm
	7	0.3		18	%
	8	0.2		19	
	9	0.2		20	
	10	0.2		21	
Transect	1 wetted width			23	Channel Feature:
	2 _____ m			24	
	3			25	
	4 measurements			26	Dissolved Oxygen
	5 _____ m			.	
	6 apart			.	ppm
	7			.	%
	8			n	
	9				
	10				

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

WBID# 1307
 Site# 2

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>3:30 PM 5/18/07</u>	Site Location Description (e.g., road crossing): <u>N. of Cty. Road 5508</u>
Personnel (Data Collectors): <u>Mark & Jon</u>	Facility Name: <u>Hume Mine</u>
Current Weather Conditions: <u>Sunny 75°</u>	Permit Number: <u>MD0126080</u>
Weather Conditions for Past 10 days:	
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: <u>38.145</u>	Y: <u>094.52629</u> <u>road betw. 2 & 3</u>
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 _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

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

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 checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input 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 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:

2 Channel Feature

RUN = 60%
RIFFLE = 40%
POOL = 0%

* Page Two - Data Sheet B for WBID # 1307 : Site #2

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	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock
----------	----------	--------	--------	------------	-----------

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

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input 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 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 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: [Signature] Date of Survey: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A Start at Right 22.2°C	1 wetted width	0.1 (0.4)		1	Channel Feature: run
	2 5.7 m	0.2		2	
	3	0.4		3	
	4 measurements	0.3		4	Dissolved Oxygen
	5 0.5 m	0.4		5	
	6 apart	(0.3)	15.6 ppm	6	15.6 ppm
	7	0.3		7	
	8	0.3		8	
	9	0.2		9	
	10	0.1		10	
Transect B bedrock	1 wetted width	0.1 (0.4)		12	Channel Feature: riffle
	2 4.0 m	0.1		13	
	3	0.1		14	
	4 measurements	(0.2)	15.6	15	Dissolved Oxygen:
	5 m	0.2		16	
	6 apart	0.1		17	15.6 ppm
	7	0.1		18	
	8	0.1		19	
	9	0.1		20	
	10	0.1		21	
Transect C bedrock	1 wetted width			23	Channel Feature: run
	2 5.6 m	0.1 (0.5)		24	
	3	0.1		25	
	4 measurements	0.1		26	Dissolved Oxygen
	5 m	0.2			
	6 apart	0.2			16.0 ppm
	7	(0.2)	16.0		
	8	0.2		n	
	9	0.1			
	10	0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect D bedrock	wetted width	0.1 (0.1)		1	Channel Feature:
	<u>7.0 m</u>	0.1		2	run
		0.1		3	
	measurements	0.1		4	Dissolved Oxygen
	<u>0.7 m</u>	0.1		5	
	apart	0.2	14.8 ppm	6	14.8 ppm
		0.1		7	
		0.2		8	
		0.2		9	
		0.1		10	
Transect E bedrock Some silt deposits	wetted width	0.1 (0.2)		12	Channel Feature:
	<u>6.8 m</u>	0.2		13	
		0.2		14	
	measurements	0.1		15	Dissolved Oxygen:
	<u> m</u>	0.2		16	
	apart	0.2	14.5	17	14.5 ppm
		0.2		18	
		0.2		19	
		0.2		20	
		0.1		21	
Transect F bedrock	wetted width	0.1 (1.0)		23	Channel Feature:
	<u>7.3 m</u>	0.2		24	
		0.2		25	
	measurements	0.2		26	Dissolved Oxygen
	<u>0.6 m</u>	0.2		.	
	apart	0.3	14.0	.	14.0 ppm
		0.3		.	
		0.2		n	
		0.3			
		0.2			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G Mud + some bedrock	1 wetted width	0.1 (0.1)		1	Channel Feature:
	2 6.5 m	0.2		2	run
	3	0.2		3	
	4 measurements	0.3		4	Dissolved Oxygen
	5 0.6 m	0.2		5	
	6 apart	0.3	13.8 ppm	6	13.8 ppm
	7	0.3		7	ppm
	8	0.3		8	%
	9	0.3		9	
	10	0.1		10	
Transect H bedrock	1 wetted width	0.1 (0.4)		12	Channel Feature:
	2 6.5 m	0.1		13	
	3	0.1		14	
	4 measurements	0.2		15	Dissolved Oxygen:
	5 0.6 m	0.2		16	
	6 apart	0.2	13.1 ppm	17	13.1 ppm
	7	0.2		18	ppm
	8	0.2		19	%
	9	0.1		20	
	10	0.1		21	
Transect I bedrock	1 wetted width	0.1 (0.3)		23	Channel Feature:
	2 5.0 m	0.1		24	
	3	0.1		25	
	4 measurements	0.1		26	Dissolved Oxygen
	5 m	0.2		.	
	6 apart	0.1		.	13.4 ppm
	7	0.2	13.4 ppm	.	ppm
	8	0.2		n	%
	9	0.1			
	10	0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307 Site # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transsect J sed rock cut bank slump at Left	1 wetted width	0.1 (0.1)		1	Channel Feature:
	2 8.6 m	0.1		2	run
	3	Zero		3	
	4 measurements	0.1		4	Dissolved Oxygen
	5 0.8 m	0.2		5	
	6 apart	0.3		6	12.5 ppm
	7	0.3		7	%
	8	0.3	12.5 ppm	8	
	9	0.2		9	
	10	0.3		10	
Transsect K sed rock thute	1 wetted width	0.1 (0.3)		12	Channel Feature:
	2 3.4 m	0.2		13	riffle
	3	0.2		14	
	4 measurements	0.2		15	Dissolved Oxygen:
	5 m	0.1		16	
	6 apart	0.2		17	12.6 ppm
	7	0.2	12.6 ppm	18	%
	8	0.2		19	
	9	0.1		20	
	10	< 0.1		21	
Transsect Lots of aquatic veg. - submergent & emergent	1 wetted width			23	Channel Feature:
	2 m			24	
	3			25	
	4 measurements			26	Dissolved Oxygen
	5 m			.	
	6 apart			.	ppm
	7			.	%
	8			n	
	9				
	10				

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 9/18/07

Organization: BWR Position: field team member

WBID# 1307
 Site# 3

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>5:30 PM 5/18/07</u>	Site Location Description (e.g., road crossing): <u>S. of Road 5508</u>
Personnel (Data Collectors): <u>Mark & Jon</u>	Facility Name: <u>Hume mine</u>
Current Weather Conditions: <u>Sunny 75°F</u>	Permit Number: <u>MO 0126080</u>
Weather Conditions for Past 10 days:	
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: <u>38.145</u>	Y: <u>09452629 road between 2 & 3</u>
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 _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

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

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 checked="" 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 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:

70% Channel Feature

RUN = 60%
RIFPLE = 20%
POOL = 20%

* Page Two - Data Sheet B for WBID # 1307 : Site # 3
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)
RIFPLE					
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)
RIFPLE					
RUN					
POOL					

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

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

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

[Empty box for Aquatic Vegetation notes]

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 type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>Brown Green</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" 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: [Signature] Date of Survey: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307

Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A Start at left bedrock bottom large round pool	1 wetted width	0.1 (0.5)		1 Channel Feature:	
	2 12.5 m	0.4		2	pool
	3	0.5		3	
	4 measurements	0.7		4 Dissolved Oxygen	
	5 m	0.7		5	
	6 apart	0.8	11.6 ppm	6 11.6 ppm	
	7	0.8		7	
	8	0.7		8	20.7°C
	9	0.4		9	
	10	0.1		10	
Transect B upper end of above pool mud bedrock	1 wetted width	0.1 (0.2)		12 Channel Feature:	
	2 12.7 m	0.3		13	pool
	3	0.4		14	
	4 measurements	0.5		15 Dissolved Oxygen:	
	5 m	0.5		16	
	6 apart	0.5	11.0 ppm	17 11.0 ppm	
	7	0.5		18	
	8	0.5		19	
	9	0.4		20	
	10	0.1		21	
Transect C bedrock bottom	1 wetted width			23 Channel Feature:	
	2 7.7 m	0.1 (0.3)		24	run
	3	0.3		25	
	4 measurements	0.5	10.6 ppm	26 Dissolved Oxygen	
	5 m	0.4		.	
	6 apart	0.4		. 10.6 ppm	
	7	0.4		.	
	8	0.3		n	
	9	0.2			
	10	0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 5/18/07

Organization: BWR Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1307

Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transsect D bedrock bottom	wetted width	0.1 (0.3)		1	Channel Feature:
	9.0 m	0.3		2	run
		0.4		3	
	measurements	0.5		4	Dissolved Oxygen
	0.9 m	0.5	10.6 ppm	5	
	apart	0.5		6	10.6 ppm
		0.4		7	ppm
		0.3		8	%
		0.3		9	
		0.1		10	
Transsect E bedrock	wetted width	0.1 (0.1)		12	Channel Feature:
	9.1 m	0.3		13	run
		0.4		14	
	measurements	0.5		15	Dissolved Oxygen:
	m	0.5	10.3 ppm	16	
	apart	0.5		17	10.3 ppm
		0.4		18	ppm
		0.3		19	%
		0.3		20	
		0.1		21	
Transsect F bedrock silt below brush jam	wetted width	0.1 (0.1)		23	Channel Feature:
	9.1 m	0.4		24	
		0.6		25	
	measurements	0.6		26	Dissolved Oxygen
	0.9 m	0.6		.	
	apart	0.7	9.9 ppm	.	9.9 ppm
		0.7		.	%
		0.5		n	
		0.3			
		0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature]

Date: 5/18/09

Organization: DBWR

Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1357

Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G gravel substrate above brush jam	1 wetted width	0.1 (0.1)		1	Channel Feature:
	2 5.3 m	0.2		2	run
	3	0.3		3	
	4 measurements	0.3		4	Dissolved Oxygen
	5 0.5 m	0.3	9.9 ppm	5	
	6 apart	0.3		6	9.9 ppm
	7	0.3		7	
	8	0.2		8	
	9	0.2		9	
	10	0.1		10	
Transect H bedrock & mud	1 wetted width	0.1 (0.1)		12	Channel Feature: run
	2 10.6 m	0.6		13	
	3	0.7		14	
	4 measurements	0.7	10.0 ppm	15	Dissolved Oxygen:
	5 1.0 m	0.6		16	
	6 apart	0.5		17	10.0 ppm
	7	0.5		18	
	8	0.4		19	
	9	0.3		20	
	10	0.1		21	
Transect I red rock, gravel, & mud	1 wetted width	0.1 (0.1)		23	Channel Feature:
	2 8.4 m	0.4		24	
	3	0.6		25	
	4 measurements	0.6		26	Dissolved Oxygen
	5 m	0.7	10.2 ppm	.	
	6 apart	0.6		.	10.7 ppm
	7	0.5		.	
	8	0.3		n	
	9	0.3			
	10	0.1			

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature]

Date: 5/18/07

Organization: BWR

Position: field team member

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1357 Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect J cobble & gravel riffle	wetted width	0.1 (0.7)	Ndc: riffle on right side -	1	Channel Feature:
	3.0 m	0.1	left is wet	2	ripple
		0.1		3	
	measurements	0.1	but < 0.1 w/ aquatic veg.	4	Dissolved Oxygen
	m	0.1		5	
	apart	(0.1)	10.3 ppm	6	10.3 ppm
		0.1		7	%
		0.1		8	
		0.1		9	
		0.1		10	
				11	
Transect K bedrock slabs & gravel	wetted width	0.1 (0.2)		12	Channel Feature:
	6.7 m	0.3		13	
		0.4		14	
	measurements	0.4		15	Dissolved Oxygen:
	m	(0.4)	10.2 ppm	16	
	apart	0.4		17	10.2 ppm
		0.3		18	%
		0.3		19	
		0.1		20	
		< 0.1		21	
			22		
Transect	wetted width			23	Channel Feature:
	m			24	
				25	
	measurements			26	Dissolved Oxygen
	m			.	
	apart			.	ppm
				.	%
				n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Jan York Date: 5/18/07

Organization: BWR Position: field team member



Left Bank (Site 1) of Gillum Creek.



Upstream (Site 1) of Gillum Creek.



Downstream (Site 1) of Gillum Creek.



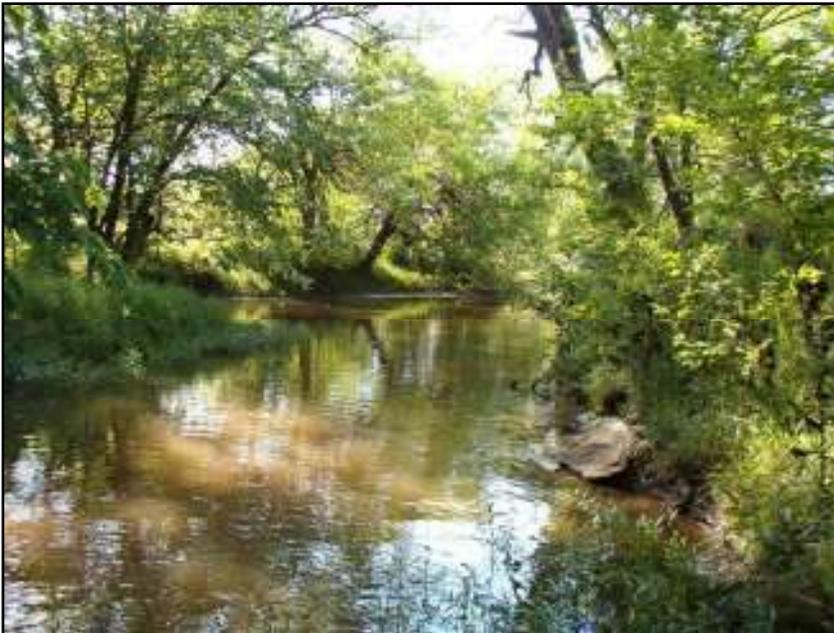
Upstream (Site 2) of Gillum Creek.



Downstream (Site 2) of Gillum Creek.



Upstream (Site 3) of Gillum Creek.



Downstream (Site 3) of Gillum Creek.

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name _____ (WBID # _____)

I. Introduction

Date & Time (include AM or PM): 12:30 5-12-07

Interviewed: In person By phone By mail

(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) _____

Interviewer introduction to Interviewee: "My name is _____, I work for _____ (name of your employer) _____, and I am collecting information on how people use _____ (name of the stream) _____."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)

Yes No If yes, list contact information for the interviewee below:

Legal name: MARK SMOTHERS
Current mailing address: 971 NW 1401 ODESSA, MO.
Daytime phone number: (816) 230-7574 Cell 803-3744
E-mail address (optional): (216)

2.a.) Do you live in this area? Yes No

If yes, how many years? 72 years (grew up on farm)

2.b.) If you don't live nearby, are you still familiar with this stream? Yes No

If yes, how many years?

If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) Yes No

If yes, proceed to "II. Personal Use?".

If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?

Yes No

If yes, proceed to #3.

If no, proceed to #2.

2.a.) List reasons stream not used.

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream? FISH

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

Went to fish Creek 3 No fish left
 Rock ledge - after rain, concern about well

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

<i>Secondary Contact Recreation</i>				
Fishing <input type="checkbox"/>	Wading <input type="checkbox"/>	Boating <input type="checkbox"/>	Trapping <input type="checkbox"/>	Other: <input type="checkbox"/> List: _____

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? Yes No

If yes, proceed to #2.

If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

Secondary Contact Recreation

Fishing Wading Boating Trapping Other: List: _____

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? Yes No

 If yes, proceed to #2.

 If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation

Swimming Tubing Snorkeling/Skin Diving Water Skiing

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation

Fishing Wading Boating Trapping Other: List:

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol). _____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? Yes No
If yes, that person's contact info (name, address, phone, directions?) _____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: WATER LEVEL & QUALITY IS NOT WHAT IT USED TO BE AND RESIDENTS HAVE CONCERNS

2.) From the Interviewer: _____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?
 Yes No If yes, how (check all that apply):

Workshop? (if so, enter date): _____

On-line training seminar? _____

Followed Interview Instruction Sheets? _____

Other _____

Interviewer Information:

Signature: _____

Printed Name: _____

Employer (where applicable): _____

Interviewer's phone #: _____ E-mail: _____

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name GILLAM CREEK (WBID # 1307)

I. Introduction

Date & Time (include AM or PM): 12:00 noon 5-12-07

Interviewed: In person By phone By mail

(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) _____

Interviewer introduction to Interviewee: "My name is _____, I work for _____ (name of your employer) _____, and I am collecting information on how people use _____ (name of the stream) _____."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)

Yes No If yes, list contact information for the interviewee below:

Legal name: LINDA SCALVETER
Current mailing address: RR1, Box 44, Home Mo. 64752
Daytime phone number: (660) 832-4495
E-mail address (optional):

2.a.) Do you live in this area? Yes No

If yes, how many years? 17 year

2.b.) If you don't live nearby, are you still familiar with this stream? Yes No

If yes, how many years?

If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) Yes No

If yes, proceed to "II. Personal Use?".

If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?

Yes No

If yes, proceed to #3.

If no, proceed to #2.

2.a.) List reasons stream not used.

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

USED ONLY FOR WATER CATTLE

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

<i>Secondary Contact Recreation</i>				
Fishing <input type="checkbox"/>	Wading <input type="checkbox"/>	Boating <input type="checkbox"/>	Trapping <input type="checkbox"/>	Other: <input type="checkbox"/> List: _____

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? Yes No

If yes, proceed to #2.

If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

Secondary Contact Recreation

Fishing Wading Boating Trapping Other: List:

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? Yes No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation

Swimming Tubing Snorkeling/Skin Diving Water Skiing

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation

Fishing Wading Boating Trapping Other: List:

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol). _____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? Yes No
If yes, that person's contact info (name, address, phone, directions?) _____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: _____

2.) From the Interviewer: _____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?
 Yes No If yes, how (check all that apply):

Workshop? (if so, enter date): _____

On-line training seminar? _____

Followed Interview Instruction Sheets? _____

Other _____

Interviewer Information:

Signature: _____

Printed Name: _____

Employer (where applicable): _____

Interviewer's phone #: _____ E-mail: _____