



## Use Attainability Analysis

for

WBID 3313 Poney Creek

Submitted by  
BWR

July 11, 2007

Submitted to:  
Missouri Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program

**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):	<u>Poney Creek</u>
Missouri Water Body Identification (WBID) Number:	<u>343</u>
8-digit HUC: <u>10290108</u>	County: <u>CASS</u>
Upstream Legal Description (from Table H):	<u>State line</u>
Downstream Legal Description (from Table H):	<u>13, 44N, 33W</u>
Number of sites evaluated	<u>4</u>
List all sites numbers, listed consequently upstream to downstream:	<u>1, 2, 3, 4</u>

**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	Y	UTM X	Y
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	± <u>14</u> Feet or ± _____ Meters	_____	
PDOP		± _____ Feet or ± _____ Meters	

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

Discharger Facility Name(s):	<u>CASS CO. Midway R-1 School District</u>
Discharger Permit Number(s):	<u>MO 0109282</u>

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

Name of Surveyor	<u>Amy Dziadewski</u>	Telephone Number:	<u>(816) 303-2696</u>
Organization/Employer:	<u>BWR</u>		
Position:	<u>Environmental Scientist</u>		

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

Signed: Amy M. Dziadewski Date: 5/22/07  
 February 5, 2007 Page 22



Poney Creek  
WBID #3313



WBID# 3313  
 Site# 1

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

Date & Time: <u>May 22nd, 2007</u>	Site Location Description (e.g., road crossing): <u>Crossing at Bennett Road</u>
Personnel (Data Collectors): <u>Amy Duchowski, John [unclear]</u>	Facility Name: <u>CASS CO. MIDWAY R-1 SCHOOL DIST.</u>
Current Weather Conditions: <u>Sunny</u>	Permit Number: <u>MO 0109282</u>
Weather Conditions for Past 10 days: <u>[unclear]</u>	
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: 094.59841°W Y: 38.03749°N

**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	± <u>26</u> Feet or ± _____ Meters	± _____ Feet or ± _____ Meters	
PDOP			

Photos: see photolog

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>1</u>	<u>up</u>	<u>2</u>	<u>down</u>		

**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 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 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:

10 Channel Feature

RUN: 00  
RIFFLE: 20  
POOL: 20

\* Page Two - Data Sheet B for WBID # 3313 : Site #1  
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%.)

<u>50</u> % Cobble	% Gravel	% Sand	% Silt	<u>40</u> % Mud/Clay	<u>10</u> % Bedrock
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Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site)

Small amounts of algae

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 checked="" 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 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: 5/23/07

Organization: BWR Position: ENV. SCI.

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

WBID # 3313 Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A	1 wetted width	< 0.1 m		1	Channel Feature:
	2 3.5 m	0.1 m		2	Pool
	3	0.2 m		3	
	4 measurements	0.2 m		4	Dissolved Oxygen
	5 0.35 m	0.3 m		5	
	6 apart	0.3 m		6	9.4 ppm
	7	0.2 m		7	9.4 ppm
	8	0.2 m		8	
	9	0.1 m		9	
	10	0.1 m		10	
Transect B	1 wetted width	< 0.1 m		12	Channel Feature:
	2 4 m	0.2 m		13	Run
	3	0.2 m		14	
	4 measurements	0.2 m		15	Dissolved Oxygen:
	5 0.9 m	0.1 m		16	
	6 apart	0.1 m		17	8.5 ppm
	7	0.1 m		18	8.5 ppm
	9	0.1 m		19	
	9	0.1 m		20	
	10	< 0.1 m		21	
Transect C	1 wetted width	< 0.1 m		23	Channel Feature:
	2 3.5 m	< 0.1 m		24	Run
	3	0.1 m		25	
	4 measurements	0.1 m		26	Dissolved Oxygen
	5 0.35 m	0.1 m			
	6 apart	< 0.1 m			8.5 ppm
	7	< 0.1 m			8.5 ppm
	8	< 0.1 m		n	
	9	< 0.1 m			
	10	< 0.1 m			

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: Amy M. Byalucki Date: 5/22/07

Organization: BWR Position: Env. Sci.

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

WBID # 3313

Site # 1

transect D

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 wetted width	< 0.1m		1	Channel Feature:
2 1.0 m	0.1m		2	RIFLE
3	0.1m		3	
4 measurements	0.1m		4	Dissolved Oxygen
5 0.1 m	0.1m		5	
6 apart	< 0.1m		6	7.91 ppm
7	< 0.1m		7	7.0
8	0.1m		8	
9	< 0.1m		9	
10	< 0.1m		10	
			11	
transect E 1 wetted width	< 0.1m		12	Channel Feature:
2 4.0 m	0.2m		13	POOL
3	0.2m		14	
4 measurement	0.2m		15	Dissolved Oxygen:
5 0.4 m	0.2m		16	
6 apart	0.2m		17	7.5 ppm
7	0.1m		18	7.3
9	0.1m		19	
9	0.1m		20	
10	0.1m		21	
			22	
transect F 1 wetted width	0.1m		23	Channel Feature:
2 3.0 m	0.3m		24	RUN
3	0.3m		25	
4 measurements	0.4m		26	Dissolved Oxygen
5 0.3 m	0.5m		.	
6 apart	0.5m		.	6.4 ppm
7	0.5m		.	6.0
8	0.4m		n	
9	0.4m			
10	< 0.1m			

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: Andy M. Bialoski

Date: 5/22/07

Organization: BWR

Position: ENV. SCI.

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

WBID # 3313

Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G	wetted width	< 0.1m		1	Channel Feature:
	1.0 m	< 0.1m		2	RIPPLE
		< 0.1m		3	
	measurements	< 0.1m		4	Dissolved Oxygen
	0.1 m	< 0.1m		5	
	apart	< 0.1m		6	7.8 ppm
		< 0.1m		7	7.0
		< 0.1m		8	
		< 0.1m		9	
		< 0.1m		10	
Transect H	wetted width	< 0.1m		12	Channel Feature:
	4.0 m	0.2m		13	POOL - RUN
		0.1m		14	
	measurements	0.1m		15	Dissolved Oxygen:
	0.4 m	< 0.1m		16	
	apart	< 0.1m		17	4.4 ppm
		< 0.1m		18	4.4
		< 0.1m		19	
		< 0.1m		20	
		< 0.1m		21	
Transect I	wetted width	0.1m		23	Channel Feature:
	3.0 m	0.1m		24	POOL
		0.2m		25	
	measurements	0.1m		26	Dissolved Oxygen
	0.3 m	0.2m			
	apart	0.1m			6.4 ppm
		0.1m			6.1
		0.1m		n	
		0.1m			
		< 0.1m			

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: Angela M. Beaton Date: 5/22/07  
 Organization: BWR Position: ENV. SC.

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

WBID # 3313 Site # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect J	1 wetted width	<0.1m		1	Channel Feature:
	2 4.0 m	0.1m		2	RUN
	3	0.1m		3	
	4 measurements	<0.1m		4	Dissolved Oxygen:
	5 0.4 m	<0.1m		5	
	6 apart	<0.1m		6	7.5 ppm
	7	0.1m		7	7.3 %
	8	0.1m		8	
	9	0.1m		9	
	10	<0.1m		10	
Transect K	1 wetted width	<0.1m		12	Channel Feature:
	2 0.3 m	<0.1m		13	RUN
	3	<0.1m		14	
	4 measurements	<0.1m		15	Dissolved Oxygen:
	5 0.05 m	0.1m		16	
	6 apart	<0.1m		17	7.4 ppm
	7	<0.1m		18	7.1 %
	8	<0.1m		19	
	9	<0.1m		20	
	10	<0.1m		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: Arny M. Dziedziuszka Date: 5/22/07

Organization: BWR Position: ENR. SCF.

WBID# 3213  
 Site# 2

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

Date & Time: <u>May 22, 2007</u>	Site Location Description (e.g., road crossing): <u>Upstream from bridge crossing on Hwy Rd.</u>
Personnel (Data Collectors): <u>Amy Dondoski, Anthony</u>	
Current Weather Conditions: <u>Sunny</u>	Facility Name: <u>J</u>
Weather Conditions for Past 10 days: <u>J</u>	Permit Number:
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:**

<b>LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)</b>	
Site GPS Coordinates: UTM X: <u>32 094 51332</u> °W	Y: <u>38 101308</u> °N
<b>HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)</b>	
Global Positioning System (GPS)	
Static Mode	Interpolation
Dynamic Mode (Kinematic)	Topographic Map or DRG
Precise Positioning Service	Aerial Photograph or DOQQ
Signal Averaging	Satellite Imagery
Real Time Differential Processing	Interpolation Other
<b>HORIZONTAL ACCURACY ESTIMATE</b>	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
EPE ± <u>10</u> Feet or ± _____ Meters	
PDOP	
	± _____ Feet or ± _____ Meters

**Photos:**

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>3</u>	<u>upstream</u>	<u>4</u>	<u>down</u>		

**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 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: None

Channel Feature

RUN: 80  
RIFLE: 0  
POOL: 20

\* Page Two - Data Sheet B for WBID # 3313: 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)
RIFLE					
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)
RIFLE					
RUN					
POOL					

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

<u>50</u> % Cobble	% Gravel	% Sand	% Silt	<u>50</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site)

None Visible

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 checked="" 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 checked="" 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 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: 5/22/07  
Organization: BWR Position: ENV. SCI.

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

WBID # 3313 Site # 2

Transsect	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
A	wetted width	0.1m		1	Channel Feature: RUN
	1 m	0.6m		2	
		0.7m		3	
	measurements	>1.0		4	Dissolved Oxygen
	1.7 m	>1.0		5	
	apart	>1.0		6	5.3 ppm
		>1.0		7	5.2 ppm
		0.6		8	
		0.6		9	
		0.1m		10	
			11		
B	wetted width	0.1m		12	Channel Feature: RUN
	1 m	0.3m		13	
		0.6m		14	
	measurements	0.9m		15	Dissolved Oxygen:
	0.7 m	0.9m		16	
	apart	0.7m		17	5.65 ppm
		0.5m		18	5.0 ppm
		0.4m		19	
		0.2m		20	
		0.1m		21	
			22		
C	wetted width	<0.1m		23	Channel Feature: RUN
	0 m	0.3m		24	
		0.8m		25	
	measurements	0.9m		26	Dissolved Oxygen:
	0.6 m	0.8m			
	apart	0.7m			5.3 ppm
		0.7m			5.2 ppm
		0.6m		n	
		0.5m			
		0.1m			

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: Amy M. Custard Date: May 22nd  
 Organization: BWR Position: Env. Scientist

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

WBID # 7713 Site # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth	
Transect D	1 wetted width	< 0.1m		1	Channel Feature:	
	2 0.5m	0.5m		2		RUN
	3	0.9m		3		
	4 measurements	> 1.0m		4	Dissolved Oxygen	
	5 0.8 m	> 1.0m		5		
	6	0.8m		6	4.9	ppm
	7	0.5m		7	4.9	
	8	0.4m		8		%
	9	0.5m		9		
	10	0.1m		10		
Transect E	1 wetted width	<del>0.1m</del> 0.1m		11		
	2 9.5 m	0.8m		12	Channel Feature:	
	3	1.0m		13		Pool / RUN
	4 measurements	> 1.0m		14		
	5 0.95 m	1.0m		15	Dissolved Oxygen:	
	6	9.0m		16		
	7	7.0m		17	4.95	ppm
	8	7.0m		18	4.9	
	9	0.7m		19		%
	10	0.2m		20		
Transect F	1 wetted width	0.1m		21		
	2 7. m	0.5m		22		
	3	7.0		23	Channel Feature:	
	4 measurements	> 1.0		24		RUN / Pool
	5 0.7 m	> 1.0		25		
	6	> 1.0		26	Dissolved Oxygen	
	7	> 1.0				5.0
	8	0.9			5.0	%
	9	0.5		nr		
	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 UA datasheet is true and accurate.

Signed: Amy M. Bjorkander Date: 5/22/07

Organization: BWR Position: ENV. SCI.

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

WBID # 371

Site # 2

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
<b>Transect C</b>				
1 wetted width	0.1m		1 Channel Feature:	
2 1.0 m	0.5m		2 Pool	
3	0.7m		3	
4 measurements	71.0m		4 Dissolved Oxygen	
5 1.0m	71.0m		5	
6 apart	71.0m		6 5.0 ppm	
7	71.0m		7 5.0 ppm	
8	71.0m		8	
9	71.0m		9	
10	5.5m		10	
<b>Transect H</b>				
1 wetted width	0.1m		12 Channel Feature:	
2 7.0 m	0.4m		13 RUN	
3	0.6m		14	
4 measurements	0.9m		15 Dissolved Oxygen:	
5 0.7 m	71.0m		16	
6 apart	71.0m		17 5.5 ppm	
7	71.0m		18 5.5 ppm	
9	71.0m		19	
9	71.0m		20	
10	71.0m		21	
<b>Transect I</b>				
1 wetted width	0.1m		23 Channel Feature:	
2 7.0m	0.5m		24 RUN	
3	0.7m		25	
4 measurements	0.9m		26 Dissolved Oxygen	
5 1.0m	71.0m			
6 apart	71.0m			
7	71.0			
8	0.09m		n	
9	0.07m			
10	0.03m			

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: Angie M. Qualander Date: 5/22/07

Organization: BWR Position: \_\_\_\_\_

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

WBID # 3313 Site # 2

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 wetted width	0.2m		1 Channel Feature :	
2 6.0 m	0.4m		2 RUN	
3 Est.	0.6m		3	
4 measurements	1.0m		4 Dissolved Oxygen	
5 m	1.0m		5	
6 apart	1.0m		6 5.02 ppm	
7	1.0m		7 50 %	
8	0.8m		8	
9	0.6m		9	
10	0.3m		10	
			11	
1 wetted width	≥ 1m		12 Channel Feature : 5.00	
2 5 m			13 RUN 50%	
3			14	
4 measurements			15 Dissolved Oxygen :	
5 5 m			16	
6 apart			17 ppm	
7			18 %	
9			19	
9			20	
10			21	
			22	
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: Amey M. Patel Date: 5/23/07

Organization: BWR Position: ENV. SC

WBID# 3313  
 Site# 3

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

Date & Time: <u>May 22, 2007</u>	Site Location Description (e.g., road crossing): <u>Downstream at bridge crossing at Bennett Road</u>
Personnel (Data Collectors): <u>Amy Dyzalowski John Foley</u>	Facility Name:
Current Weather Conditions: <u>Sunny</u>	Permit Number:
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:**

<b>LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)</b>	
Site GPS Coordinates: UTM X: _____	Y: _____
<b>HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)</b>	
Global Positioning System (GPS)	
Static Mode	Interpolation
Dynamic Mode (Kinematic)	Topographic Map or DRG
Precise Positioning Service	Aerial Photograph or DOQQ
Signal Averaging	Satellite Imagery
Real Time Differential Processing	Interpolation Other
<b>HORIZONTAL ACCURACY ESTIMATE</b>	
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 checked="" 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: \_\_\_\_\_

Channel Feature  
 RIFFLE 10  
 RUN 16  
 POOL 10

\* Page Two – Data Sheet B for WBID # 2213 Site B

**Stream Morphology:**

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

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	<u>100</u> % Mud/Clay	% Bedrock
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**Aquatic Vegetation\*:** (Note amount of vegetation or algal growth at the assessment site)

Macrophytes, Algae

**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 checked="" 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 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: [Signature] Date of Survey: 5/22/07

Organization: BWR Position: ENV. SCI

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

WBID # 3313 Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A	1 wetted width	<0.1m		1	Channel Feature:
	2 8 m	0.3m		2	RUN
	3	0.4m		3	
	4 measurements	0.6m		4	Dissolved Oxygen
	5 0.8 m	0.7m		5	
	6 apart	0.8m		6	7.1 ppm
	7	0.7m		7	7.1 ppm
	8	0.6m		8	
	9	0.5m		9	
	10	0.1m		10	
Transect B	1 wetted width	<0.1m		12	Channel Feature:
	2 3.0 m	0.1m		13	RUN
	3	0.3m		14	
	4 measurements	0.3m		15	Dissolved Oxygen:
	5 0.3 m	0.4m		16	
	6 apart	0.4m		17	7.4 ppm
	7	0.4m		18	7.4 ppm
	9	0.4m		19	
	9	0.2m		20	
	10	<0.1m		21	
Transect C	1 wetted width	<0.1m		23	Channel Feature:
	2 8 m	0.3m		24	RUN
	3	0.4m		25	
	4 measurements	0.5m		26	Dissolved Oxygen
	5 0.8 m	0.5m			
	6 apart	0.5m			7.5 ppm
	7	0.4m			7.5 ppm
	8	0.4m		n	
	9	0.3m			
	10	<0.1m			

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: Amy M. [Signature] Date: 5/22/07  
 Organization: BWR Position: BWR

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

WBID # 3313 Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth	
Transect D	1 wetted width	< 0.1m		1	Channel Feature: RIPPLE	
	2 5.5 m	0.1m		2		
	3	0.1m		3		
	4 measurements	0.1m		4	Dissolved Oxygen	
	5 0.5 m	0.1m		5		
	6 apart	0.1m		6	7.3	ppm %
	7	0.2m		7	73	
	8	0.2m		8		
	9	0.1m		9		
	10	< 0.1m		10		
Transect E	1 wetted width	0.1m		11	Channel Feature: RIPPLE	
	2 6.5 m	0.2m		12		
	3	0.3m		13		
	4 measurements	0.2m		14	Dissolved Oxygen	
	5 0.65 m	0.3m		15		
	6 apart	0.2m		16	7.06	ppm %
	7	0.2m		17	70	
	8	0.1m		18		
	9	0.1m		19		
	9	0.1m		20		
10	0.1m		21			
Transect F	1 wetted width	< 0.1m		22	Channel Feature: RUN	
	2 9.5 m	0.1m		23		
	3	0.1m		24		
	4 measurements	0.2m		25	Dissolved Oxygen	
	5 0.5 m	0.1m		26		
	6 apart	< 0.1m		.	7.0	ppm %
	7	0.5m		.	70	
	8	0.5m		n		
	9	0.3m				
	10	< 0.1m				

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 M. Gruber Date: 5/23/07

Organization: BWR Position: EM, S.C.E.

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

WBID # 3313 Site # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G	wetted width	0.1m		1	Channel Feature:
	<u>7.5 m</u>	0.4m		2	RUN/Pool
		0.7m		3	
	measurements	0.9m		4	Dissolved Oxygen
	<u>0.75 m</u>	0.9m		5	
	apart	0.8m		6	6.9 ppm
		0.7m		7	6.9 %
		0.5m		8	
		0.2m		9	
		<0.1m		10	
Transect H	wetted width	0.1m		11	
	<u>7.0 m</u>	0.5m		12	Channel Feature:
		0.8m		13	RUN/Pool
	measurements	<del>7</del> 1.0m		14	
	<u>0.7 m</u>	>1.0m		15	Dissolved Oxygen:
	apart	0.9m		16	
		0.6m		17	7.1 ppm
		0.5m		18	7.1 %
		0.3m		19	
		<0.1m		20	
Transect I	wetted width	0.1m		21	
	<u>6 m</u>	0.4m		22	
		0.6m		23	Channel Feature:
	measurements	0.7m		24	RUN
	<u>0.6 m</u>	0.7m		25	
	apart	0.9m		26	Dissolved Oxygen
		0.8m			7.1 ppm
		0.6m			7.1 %
		0.6m		n	
		0.2m			

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: Amy M. DiSalvo Date: 5/22/07

Organization: BWR Position: ENV. SCI.

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

WBID # 3313 Site # 3

Transect	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
J	wetted width	< 0.1 m		1	Channel Feature :
				2	RUN
				3	
	measurements	0.5 m		4	Dissolved Oxygen
				5	
	0.3 m	0.5 m		6	7.0 ppm
	apart	0.6 m		7	80 %
				8	
				9	
				10	
K	wetted width	0.2 m		11	
				12	Channel Feature :
				13	RUN
				14	
	measurements	0.5 m		15	Dissolved Oxygen :
				16	
	0.4 m	0.6 m		17	7.2 ppm
	apart	0.6 m		18	75 %
				19	
				20	
L	wetted width			21	
				22	
				23	Channel Feature :
				24	
				25	
	measurements			26	Dissolved Oxygen
				.	
				.	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: Ann M. Bialostocki Date: 5/23/07

Organization: BWR Position: Env. Sci

WBID# 3313  
 Site# 4

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

Date & Time: <u>May 26, 2007</u>	Site Location Description (e.g., road crossing): <u>off bridge at Westline</u>
Personnel (Data Collectors): <u>AMD, JPS</u>	
Current Weather Conditions: <u>overcast</u>	Facility Name: <u>COGS CO. Midway R-1 School DIST</u>
Weather Conditions for Past 10 days:	Permit Number: <u>MO 0109282</u>
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>094.58487W</u>	Y: <u>33.63585N</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	
Static Mode	Interpolation
Dynamic Mode (Kinematic)	Topographic Map or DRG
Precise Positioning Service	Aerial Photograph or DOQQ
Signal Averaging	Satellite Imagery
Real Time Differential Processing	Interpolation Other
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	
FOM ± _____ Meters	Interpolation Data Quality: 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
	<u>up</u>		<u>ds</u>		

**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 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 # 3313 : SITE # 4  
 Stream Morphology:

Run - 65  
 RIFFLE - 5  
 Pool - 30

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%.)

<u>70</u> % Cobble	<u>5</u> % Gravel	% Sand	% Silt	<u>5</u> % Mud/Clay	<u>10</u> % Bedrock
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Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site)

periphyton

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: Amy M. Bryant Date of Survey: 5/26/07  
 Organization: BWR Position: Env. Sci

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

WBID # 3313

Site # 4

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect A	wetted width	0.1 m		1	Channel Feature:
	4.5 m	0.1 m		2	Run
		0.1 m		3	
	measurements	0.1 m		4	Dissolved Oxygen:
	0.4 m	< 0.1 m		5	
	apart	< 0.1 m		6	9.2 ppm
		< 0.1 m		7	
		< 0.1 m		8	
		< 0.1 m		9	
		< 0.1 m		10	
Transect B	wetted width	0.1 m		11	
	2 m	0.1 m		12	Channel Feature:
		0.1 m		13	Run
	measurements	0.1 m		14	
	0.9 m	0.1 m		15	Dissolved Oxygen:
	apart	0.1 m		16	
		0.1 m		17	9.6 ppm
		0.1 m		18	
		0.1 m		19	
		< 0.1 m		20	
Transect C	wetted width	0.1 m		22	
	0.5 m	0.1 m		23	Channel Feature:
		0.1 m		24	Run
	measurements	0.1 m		25	
	0.9 m	0.1 m		26	Dissolved Oxygen:
	apart	0.3 m			
		0.3 m			9.39 ppm
		0.3 m			
		0.3 m		n	
		0.1 m			

If there is an odd number of entries find middle rank  $[(n+1)/2]$ . The corresponding sorted value depth 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: Sam M. Dzialowski

Date: 5/26/07

Organization: BWR

Position: ENR. SCI

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

WBID # 3313

Site # 4

Transect	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
D	1 wetted width	3.1m		1	Channel Feature:
	2 0.9 m	0.7m		2	RUN
	3	3.7m		3	
	4 measurements	2.4		4	Dissolved Oxygen:
	5 0.9 m	2.4m		5	
	6 apart	7.5m		6	
	7	0.3m		7	9.4 ppm
	8	2.4m		8	
	9	2.4m		9	
	10	5.4m		10	
E	1 wetted width			11	
	2 1.0 m	5.0m		12	Channel Feature:
	3	5.0m		13	CUT
	4 measurements	< 0.1m		14	
	5 0.7 m	< 0.1m		15	Dissolved Oxygen:
	6 apart	0.1m		16	
	7	< 0.1m		17	9.5 ppm
	8	0.1m		18	
	9	0.1m		19	
	10	0.1m		20	
F	1 wetted width	0.2m		22	
	2 1.2m	0.4m		23	Channel Feature:
	3	0.5m		24	RUN
	4 measurements	0.5m		25	
	5 1.2 m	0.5m		26	Dissolved Oxygen:
	6 apart	0.5m			
	7	0.5m			9.7 ppm
	8	0.5m			
	9	0.5m		n	
	10	0.3m			

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: Amy M. Brubaker Date: 5/26/07  
 Organization: BWR Position: Env. Sci.

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

WBID # 3313

Site # 4

Transect	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
Transect G	wetted width	0.2m			
	1.05 m	0.5m		1	Channel Feature:
		0.5m		2	FD
	measurements	0.6m		3	
	1.0 m	0.7m		4	Dissolved Oxygen
	apart	0.9m		5	
		0.9m		6	9.6
		0.9m		7	ppm
		0.9m		8	7
		5.1m		9	
			10		
Transect H	wetted width	0.1m		11	
	0.5 m	0.4m		12	Channel Feature:
		0.5m		13	RUN
	measurements	0.5m		14	
	0.85 m	0.6m		15	Dissolved Oxygen:
	apart	0.6m		16	
		0.7m		17	9.8
		0.9m		18	ppm
		0.9m		19	7
		0.1m		20	
Transect I	wetted width	0.1m		22	
	1.2 m	0.5m		23	Channel Feature:
		0.4m		24	RUN
	measurements	0.5m		25	
	1.2 m	0.5m		26	Dissolved Oxygen
	apart	0.5m			
		0.5m			9.87
		0.5m			ppm
		0.5m			7
		0.3m		n	
	0.1m				

If there is an odd number of entries find middle rank  $[(n+1)/2]$ . The corresponding sorted value depth is 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: Amy M. Gustafson

Date: 5/26/07

Organization: BWR

Position: ENV. SCI

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

WBID # 3313

Site # 4

Transsect	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
J	1 wetted width	0.1m			
	2 13 m	0.4m		1	Channel Feature:
	3	0.5m		2	Pool
	4 measurements	0.5m		3	
	5 13 m	0.5m		4	Dissolved Oxygen
	6 apart	0.5m		5	
	7	0.4m		6	9.92 ppm
	8	0.5m		7	
	9	0.5m		8	
	10	0.1m		9	
K	1 wetted width	0.1m		10	
	2 0 m	0.4m		11	
	3	0.4m		12	Channel Feature:
	4 measurements	0.4m		13	Pool
	5 0.5 m	0.4m		14	
	6 apart	0.3m		15	Dissolved Oxygen:
	7	0.2m		16	
	8	0.1m		17	9.64 ppm
	9	<0.1m		18	
	10	<0.1m		19	Temp 21°C
L	1 wetted width			20	
	2 _____ m			21	
	3			22	
	4 measurements			23	Channel Feature:
	5 _____ m			24	
	6 apart			25	
	7			26	Dissolved Oxygen
	8			.	
	9			.	
	10			n	

If there is an odd number of entries find middle rank  $[(n+1)/2]$ . The corresponding sorted value depth 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: Amy M. [Signature] Date: 5/20/07  
 Organization: Buck Position: Env. Sci

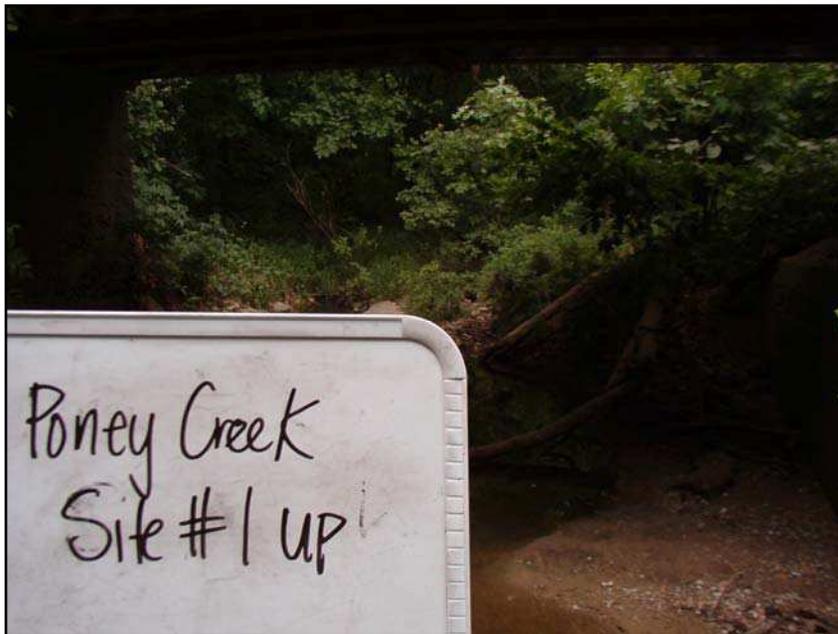
February 5, 2007



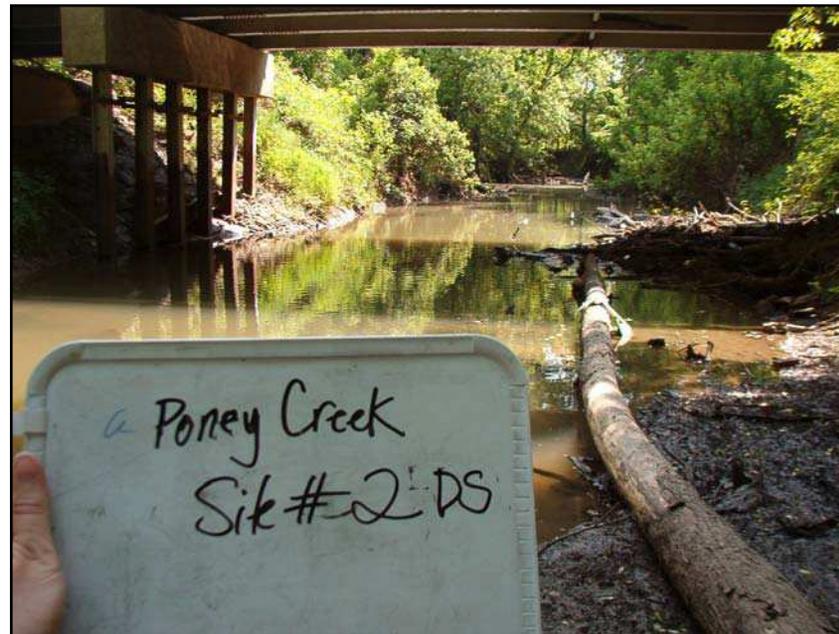
Downstream (Site #1) of Poney Creek.



Downstream (Site #1) of Poney Creek.



Upstream (Site #1) of Poney Creek.



Downstream (Site #2) of Poney Creek.



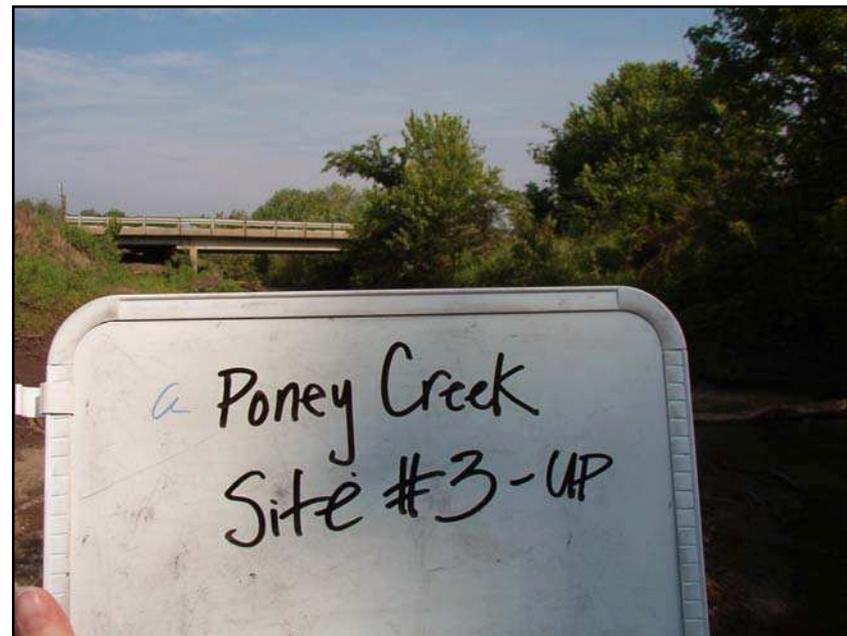
Upstream (Site #2) of Poney Creek.



Downstream (Site #3) of Poney Creek.



Downstream (Site #3) of Poney Creek.



Upstream (Site #3) of Poney Creek.



Upstream (Site 4) of Poney Creek



Downstream (Site 4) of Poney Creek