Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0328 Little Third Fork Platte River

Submitted by
BWR

to
Missouri Department of Natural Resources
Water Protection Program

Date received: June 29, 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):	Little Third Fork Platte River
Missouri Water Body Identification (WBID) Number:	328
8-digit HUC: 10840012	County: Dekalb
Upstream Legal Description (from Table H):	27, 60N, 32W
Downstream Legal Description(from Table H):	MOUTH
Number of sites evaluated	12
List all sites numbers, listed consequently upstream to downstream: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	

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. Subegmentation (fill this section out only in cases where subesgmentation is being proposed)

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Upstream Coordinates: UTM X	Y	Downstream Coordinates: 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	± _____ Feet or ± _____ Meters	± _____ Feet or ± _____ Meters
PDOP		

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

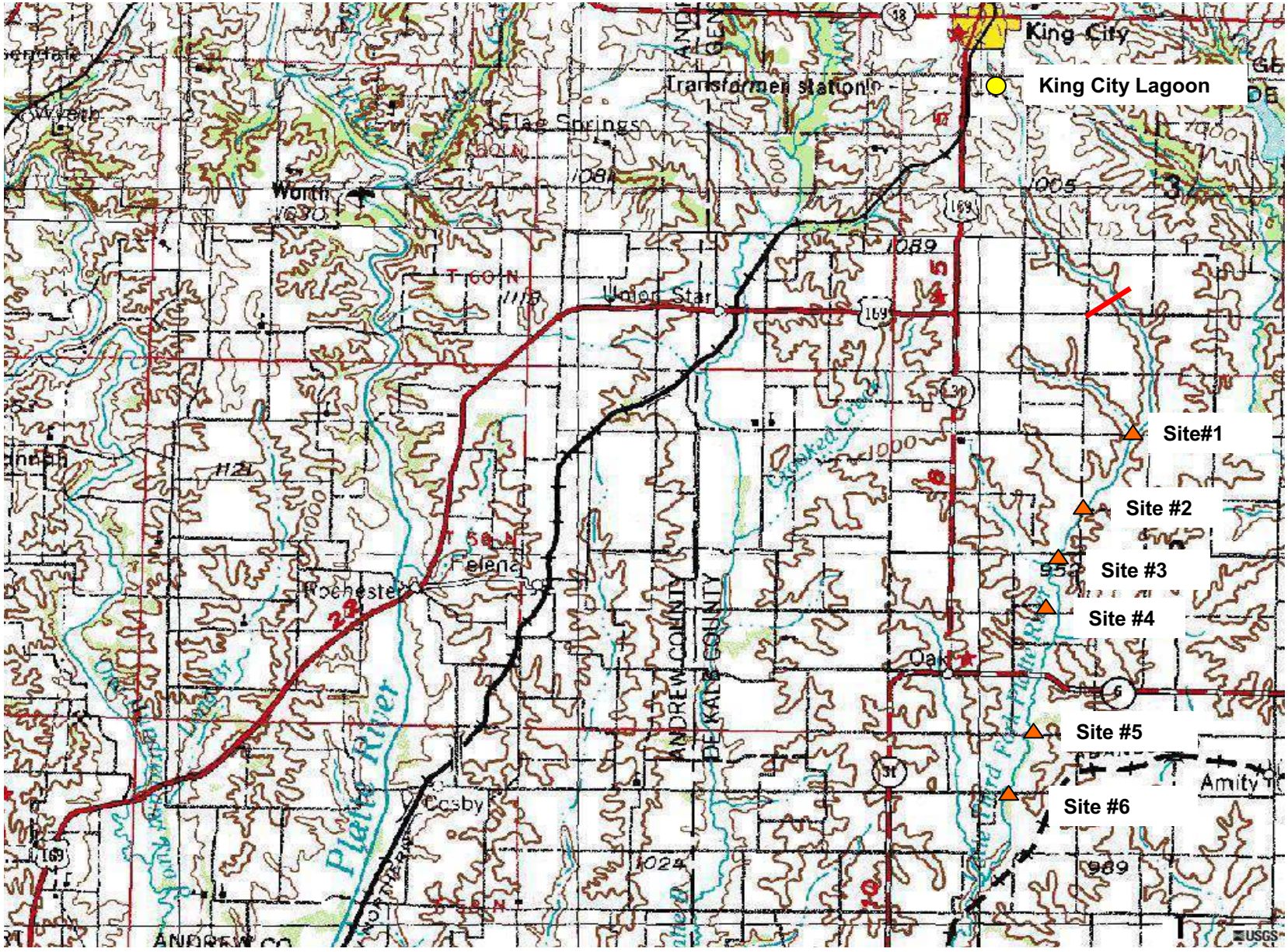
Discharger Facility Name(s):	CLARKSDALE WWTF, KING CITY LAGOON
Discharger Permit Number(s):	MO0117161, MO0049662

IV. UAA Surveyor (please print legibly)

Name of Surveyor ALEX BARTLETT	Telephone Number: 816.363.2696
Organization/Employer: BWR CORPORATION	
Position: ENVIRONMENTAL SCIENTIST	

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

Signed: _____ **Date:** 06/12/07

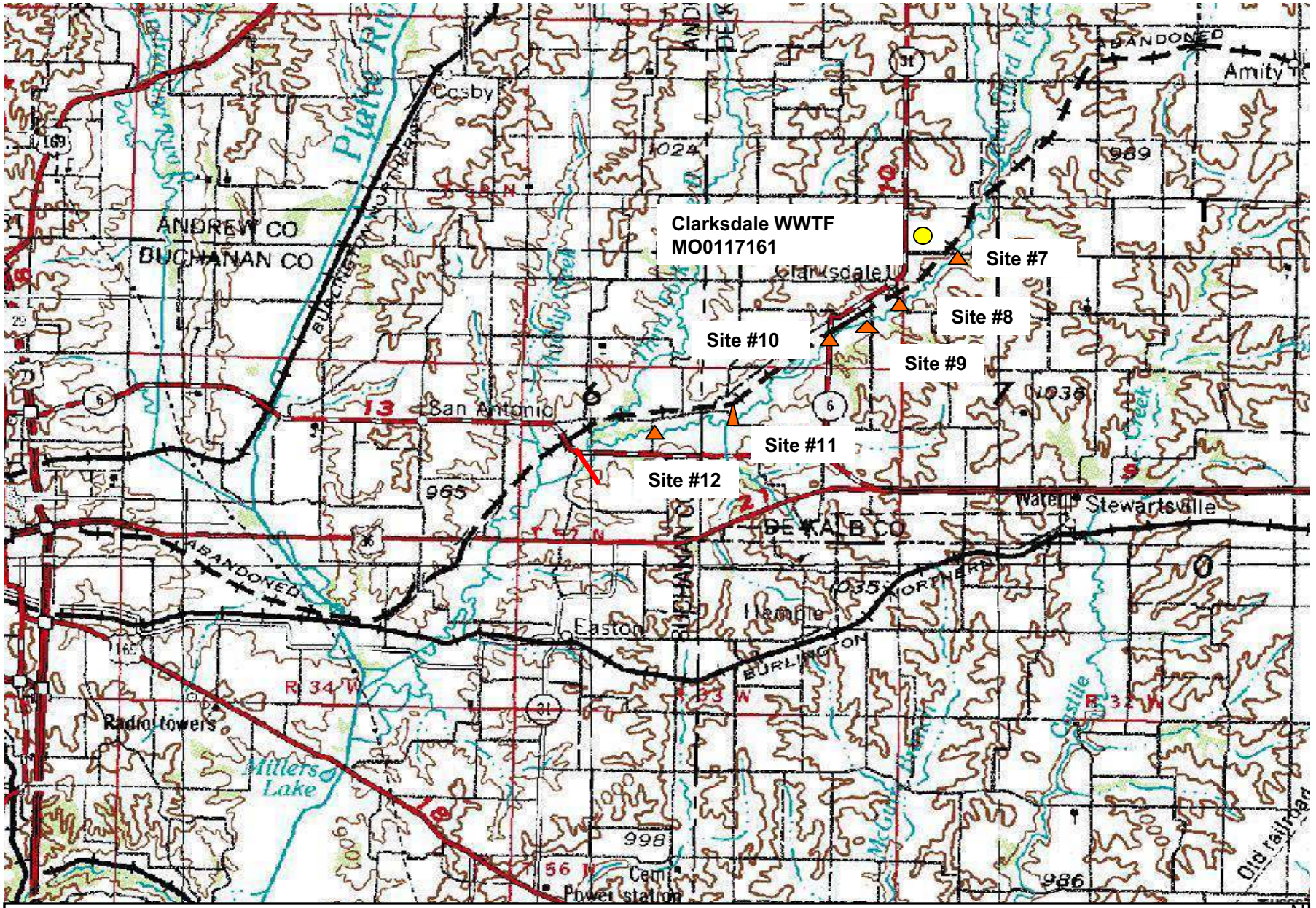


BWR

Little Third Fork Platte River

WBID 328 Pg. 1 of 2

N



Little Third Fork Platte River

WBID #328 Pg. 2 of 2

WBID# 328
Site# 1

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

Date & Time: 6/11/07 10:00	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ NW GOSPEL RD. (DOWNSTREAM)
Personnel (Data Collectors): BARTLETT & LUNT	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Current Weather Conditions: OVERCAST, 75°	Permit Number: MO#117161, MO#049662
Weather Conditions for Past 10 days: FAIR/RAIN	

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

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X 39.95090 Y: 094.47667

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-1,2	TRAN J-K	328-3,4	TRAN. B-A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreation Use Interview* when conducting interviews.)

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

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: CR NW GOSPEL

Channel Feature
RUN: 90
RIFFLE:
POOL: 10

*** Page Two – Data Sheet B for WBID # 328 : 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%.)

% Cobble	5 % Gravel	5 % Sand	80% Silt	10% Mud/Clay	% Bedrock

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

SPARSE MACROPHYTE GROWTH ON BOTH BANKS (ARROWHEAD)
NO ALGAL GROWTH OBSERVED

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☐ Green	☐ Gray	☐ Milky	☒ Other: BROWN, TURBID
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: 6/11/07

Organization: EWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	<0.1			1 Channel Feature:	
2	1.5 m	<0.1			2 RUN 100%	
3		<0.1			3	
4	measurements	<0.1			4 Dissolved Oxygen	
5	0.15 m	<0.1			5	
6	apart	<0.1			6 8.45	ppm
7		<0.1			7 ____	%
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect B 1	wetted width	<0.1			12 Channel Feature:	
2	2.0 m	<0.1			13 RUN 100%	
3		<0.1			14	
4	measurements	0.1			15 Dissolved Oxygen:	
5	0.20 m	0.1			16	
6	apart	<0.1			17 8.95	ppm
7		<0.1			18 ____	%
8		<0.1			19	
9		<0.1			20	
10		<0.1			21	
					22	
Transect C 1	wetted width	<0.1			23 Channel Feature:	
2	1.8 m	0.1			24 RUN 100%	
3		0.1			25	
4	measurements	0.1			26 Dissolved Oxygen	
5	0.18 m	0.2			.	
6	apart	0.2			. 9.33	ppm
7		0.1			. ____	%
8		<0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	<0.1			1 Channel Feature:	
2	2.0 m	0.1			2 POOL 100%	
3		0.2			3	
4	measurements	0.2			4 Dissolved Oxygen	
5	0.20 m	0.2			5	
6	apart	0.2			6 8.59 ppm	
7		0.2			7 ___ %	
8		<0.1			8	
9		0.1			9	
10		0.1			10	
					11	
Transect E 1	wetted width	<0.1			12 Channel Feature:	
2	1.0 m	<0.1			13 RUN 100%	
3		<0.1			14	
4	measurements	<0.1			15 Dissolved Oxygen:	
5	0.10 m	<0.1			16	
6	apart	<0.1			17 9.29 ppm	
7		<0.1			18 ___ %	
8		<0.1			19	
9		<0.1			20	
10		<0.1			21	
					22	
Transect F 1	wetted width	<0.1			23 Channel Feature:	
2	1.5 m	0.1			24 RUN 100%	
3		0.1			25	
4	measurements	0.1			26 Dissolved Oxygen	
5	0.15 m	0.1			.	
6	apart	0.1			. 9.19 ppm	
7		0.1			. ___ %	
8		<0.1			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.

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Signed: _____ **Date:** 6/11/07

Organization: RWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	< 0.1			1 Channel Feature:	
2	0.8 m	< 0.1			2 RUN 100%	
3		< 0.1			3	
4	measurements	< 0.1			4 Dissolved Oxygen	
5	0.08 m	< 0.1			5	
6	apart	< 0.1			6 9.46 ppm	
7		< 0.1			7 ___ %	
8		< 0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect H 1	wetted width	< 0.1			12 Channel Feature:	
2	1.5 m	0.1			13 RUN 100%	
3		0.1			14	
4	measurements	0.1			15 Dissolved Oxygen:	
5	0.15 m	0.2			16	
6	apart	0.2			17 9.23 ppm	
7		0.1			18 ___ %	
8		< 0.1			19	
9		< 0.1			20	
10		< 0.1			21	
					22	
Transect I 1	wetted width	< 0.1			23 Channel Feature:	
2	1.0 m	0.1			24 RUN 100%	
3		0.1			25	
4	measurements	0.1			26 Dissolved Oxygen	
5	0.10 m	0.1			.	
6	apart	< 0.1			. 9.16 ppm	
7		< 0.1			. ___ %	
8		< 0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect 1						
1	wetted width	<0.1			1 Channel Feature:	
2	1.0 m	<0.1			2 RUN 100%	
3		0.1			3	
4	measurements	0.1			4 Dissolved Oxygen	
5	0.10 m	0.2			5	
6	apart	0.1			6 10.01 ppm	
7		<0.1			7 — %	
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect 2						
1	wetted width	<0.1			12 Channel Feature:	
2	1.0 m	0.1			13 RUN 100%	
3	0.10	0.2			14	
4	measurements	0.2			15 Dissolved Oxygen:	
5	m	0.2			16	
6	apart	0.1			17 9.47 ppm	
7		<0.1			18 — %	
8		<0.1			19	
9		<0.1			20	
10		<0.1			21	
					22	
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: _____ **Date:** 6/11/07

Organization: TetraTech Position: ENV. SCI.

WBID# 328
Site# #2

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

Date & Time: 6/11/07 1130	Site Location Description (e.g., road crossing): BRIDGE XING @ CR WALDO (UPSTREAM)
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST, ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: RAIN / FAIR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.93391 Y: 094.48959

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-7,8		328-5,6	TRAN B-A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: CR WALDO

7c Channel feature

RUN: 20
RIFFLE:
POOL: 80

*** Page Two – Data Sheet B for WBID # 328 : 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
	5	15	80		

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

SOME ALGAL GROWTH WHERE SOLID SUBSTRATES WERE PRESENT.

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☐ Green	☐ Gray	☐ Milky	☒ Other: BROWN, TURBID
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ 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: _____ Date of Survey: 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 2

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A	1	wetted width	<0.1			1 Channel Feature:	
	2	3.0 m	0.1			2 POOL 100%	
	3		0.1			3	
	4	measurements	0.2			4 Dissolved Oxygen	
	5	0.3 m	0.2			5	
	6	apart	0.2			6 7.03 ppm	
	7		0.2			7 ____ %	
	8		0.2			8	
	9		0.1			9	
	10		0.1			10	
						11	
Transect B	1	wetted width	<0.1			12 Channel Feature:	
	2	3.0 m	0.1			13 POOL 100%	
	3		0.2			14	
	4	measurements	0.2			15 Dissolved Oxygen:	
	5	0.30 m	0.3			16	
	6	apart	0.3			17 6.52 ppm	
	7		0.2			18 ____ %	
	8		0.1			19	
	9		0.2			20	
	10		0.1			21	
						22	
Transect C	1	wetted width	0.1			23 Channel Feature:	
	2	2.5 m	0.1			24 RUN	
	3		0.1			25	
	4	measurements	<0.1			26 Dissolved Oxygen	
	5	0.25 m	<0.1			.	
	6	apart	<0.1			. 7.25 ppm	
	7		<0.1			. ____ %	
	8		<0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 2

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D	1	wetted width	<0.1			1 Channel Feature:	
	2	1.5 m	<0.1			2 RUN 100%	
	3		<0.1			3	
	4	measurements	<0.1			4 Dissolved Oxygen	
	5	0.15 m	0.1			5	
	6	apart	<0.1			6 6.96 ppm	
	7		<0.1			7 ___ %	
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
Transect E	1	wetted width	<0.1			12 Channel Feature:	
	2	2.0 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	measurements	<0.1			15 Dissolved Oxygen:	
	5	0.20 m	<0.1			16	
	6	apart	<0.1			17 7.07 ppm	
	7		<0.1			18 ___ %	
	9		<0.1			19	
	9		<0.1			20	
	10		<0.1			21	
						22	
Transect F	1	wetted width	<0.1			23 Channel Feature:	
	2	1.0 m	<0.1			24 RUN 100%	
	3		<0.1			25	
	4	measurements	<0.1			26 Dissolved Oxygen	
	5	0.10 m	<0.1			.	
	6	apart	<0.1			. 7.10 ppm	
	7		<0.1			. ___ %	
	8		<0.1			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: _____ **Date:** 6/11/07

Organization: RWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 2

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	0.1			1 Channel Feature:	
2	1.6 m	0.1			2 RUN 100%	
3		0.1			3	
4	measurements	0.1			4 Dissolved Oxygen	
5	0.16 m	0.1			5	
6	apart	0.1			6 6.25 ppm	
7		0.1			7 ____ %	
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect H 1	wetted width	<0.1			12 Channel Feature:	
2	3.0 m	0.1			13 POOL 100%	
3		0.2			14	
4	measurements	0.2			15 Dissolved Oxygen:	
5	0.30 m	0.2			16	
6	apart	0.2			17 8.13 ppm	
7		0.2			18 ____ %	
8		0.1			19	
9		<0.1			20	
10		<0.1			21	
					22	
Transect I 1	wetted width	<0.1			23 Channel Feature:	
2	1.3 m	0.1			24 POOL 100%	
3		<0.1			25	
4	measurements	<0.1			26 Dissolved Oxygen	
5	0.23 m	0.1			.	
6	apart	0.2			. 8.21 ppm	
7		0.2			. ____ %	
8		0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 2

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect 1	1	wetted width	<0.1			1 Channel Feature:	
	2	1.2 m	<0.1			2 RUN 100%	
	3		<0.1			3	
	4	measurements	<0.1			4 Dissolved Oxygen	
	5	0.12 m	<0.1			5	
	6	apart	<0.1			6 8.10 ppm	
	7		<0.1			7 — %	
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
Transect 2	1	wetted width	<0.1			12 Channel Feature:	
	2	1.0 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	measurements	<0.1			15 Dissolved Oxygen:	
	5	0.10 m	<0.1			16	
	6	apart	<0.1			17 8.15 ppm	
	7		<0.1			18 — %	
	8		<0.1			19	
	9		<0.1			20	
	10		<0.1			21	
						22	
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 t 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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 3

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

Date & Time: 6/11/07 1230	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ GLENWOOD RD.
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST, ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CLEAR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.92074 Y: 094.49892

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	± _____ Feet or ± _____ Meters
PDOP		

Photos: FIRST 2 UPSTREAM PHOTOS ARE MISLABELED "DOWNSTREAM" *

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-9,10, 13, 14	TRAN J-K	328-11,12	TRAN B-A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: GLENWOOD RD.

% channel feature
RUN: 40
RIFFLE:
POOL: 60

*** Page Two – Data Sheet B for WBID # 328 : 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)
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
5	20	15	60		

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

SPARSE ALGAL GROWTH ON SOLID SUBSTRATES

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☒ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	< 0.1			1 Channel Feature:	
2	1.0 m	< 0.1			2 RUN 100%	
3		< 0.1			3	
4	measurements	< 0.1			4 Dissolved Oxygen	
5	0.1 m	< 0.1			5	
6	apart	< 0.1			6 5.22	ppm
7		< 0.1			7	%
8		< 0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect B 1	wetted width	< 0.1			12 Channel Feature:	
2	0.7 m	< 0.1			13 RUN 100%	
3		< 0.1			14	
4	measurements	< 0.1			15 Dissolved Oxygen:	
5	0.07 m	< 0.1			16	
6	apart	< 0.1			17 4.93	ppm
7		< 0.1			18	%
8		< 0.1			19	
9		< 0.1			20	
10		< 0.1			21	
					22	
Transect C 1	wetted width	< 0.1			23 Channel Feature:	
2	4.6 m	0.1			24 POOL 100%	
3		0.1			25	
4	measurements	0.1			26 Dissolved Oxygen	
5	0.46 m	0.1			.	
6	apart	0.1			. 4.68	ppm
7		0.1			.	%
8		0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	< 0.1			1 Channel Feature:	
2	1.0 m	< 0.1			2 RUN 100%	
3		< 0.1			3	
4	measurements	< 0.1			4 Dissolved Oxygen	
5	0.10 m	< 0.1			5	
6	apart	< 0.1			6 4.86	ppm
7		< 0.1			7	%
8		< 0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect E 1	wetted width	< 0.1			12 Channel Feature:	
2	1.8 m	0.1			13 RUN 40%	
3		0.7			14 POOL 100%	
4	measurements	0.3			15 Dissolved Oxygen:	
5	0.18 m	0.3			16	
6	apart	0.2			17 4.26	ppm
7		0.1			18	%
8		< 0.1			19	
9		< 0.1			20	
10		< 0.1			21	
					22	
Transect F 1	wetted width	< 0.1			23 Channel Feature:	
2	4.2 m	< 0.1			24 POOL 100%	
3		< 0.1			25	
4	measurements	0.1			26 Dissolved Oxygen	
5	0.42 m	0.1			.	
6	apart	0.1			. 4.30	ppm
7		0.1			.	%
8		< 0.1			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 t 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: [signature] **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # MDW-3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	<0.1			1 Channel Feature:	
2	3.6 m	<0.1			2 Pool 100%	
3		0.1			3	
4	measurements	0.1			4 Dissolved Oxygen	
5	0.36 m	0.1			5	
6	apart	0.1			6 4.73 ppm	
7		<0.1			7 ____ %	
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect H 1	wetted width	<0.1			12 Channel Feature:	
2	6.0 m	0.1			13 Pool 100%	
3		0.1			14	
4	measurements	0.2			15 Dissolved Oxygen:	
5	0.60 m	0.2			16	
6	apart	0.2			17 4.78 ppm	
7		0.2			18 ____ %	
9		0.1			19	
9		0.1			20	
10		<0.1			21	
					22	
Transect I 1	wetted width	<0.1			23 Channel Feature:	
2	4.0 m	0.1			24 Pool 100%	
3		0.1			25	
4	measurements	0.3			26 Dissolved Oxygen	
5	0.40 m	0.3			.	
6	apart	0.3			. 5.09 ppm	
7		0.1			. ____ %	
8		0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # WBM 3

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect 1	1	wetted width	0.1			1 Channel Feature:	
	2	5.0 m	0.2			2 RUN 100%	
	3		0.2			3	
	4	measurements	0.3			4 Dissolved Oxygen	
	5	0.5 m	0.4			5	
	6	apart	0.3			6 5.85	ppm
	7		0.3			7	%
	8		0.2			8	
	9		0.2			9	
	10		0.1			10	
						11	
Transect 2	1	wetted width	<0.1			12 Channel Feature:	
	2	4.5 m	0.2			13 RUN 100%	
	3		0.2			14	
	4	measurements	0.2			15 Dissolved Oxygen:	
	5	0.45 m	0.2			16	
	6	apart	0.4			17 5.36	ppm
	7		0.3			18	%
	8		0.2			19	
	9		0.1			20	
	10		<0.1			21	
						22	
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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 4

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

Date & Time: 6/11/07 1320	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ WOLFCREEK RD.
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST, ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CLEAR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 394,90170 Y: 4194,49889

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-17,18	TRAN J-K	328-15,16	TRANS B-A		

K, 16

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☐ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: CR WOLFCREEK

% Channel Feature

RUN: 15
RIFFLE: 5
POOL: 80

*** Page Two – Data Sheet B for WBID #** 328 : site 4

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
5	20	50	25		

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

SPARSE ALGAL GROWTH ON SOLID SUBSTRATES

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☒ Other: BROWN, TURBID
Bottom Deposit:	☐ Sludge	☒ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID #328 Site # 4

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	<0.1			1 Channel Feature:	
2	1.3 m	<0.1			2 RUN 100%	
3		<0.1			3	
4	measurements	<0.1			4 Dissolved Oxygen	
5	0.13 m	<0.1			5	
6	apart	<0.1			6 9.24 ppm	
7		<0.1			7 ____ %	
8		<0.1			8	
9		<6.1			9	
10		<0.1			10	
					11	
Transect B 1	wetted width	<0.1			12 Channel Feature:	
2	1.0 m	<0.1			13 RUN 100%	
3		<0.1			14	
4	measurements	<0.1			15 Dissolved Oxygen:	
5	0.10 m	<0.1			16	
6	apart	<0.1			17 9.12 ppm	
7		<0.1			18 ____ %	
9		<0.1			19	
9		<0.1			20	
10		<0.1			21	
					22	
Transect C 1	wetted width	<0.1			23 Channel Feature:	
2	4.0 m	<0.1			24 POOL 100%	
3		0.1			25	
4	measurements	0.2			26 Dissolved Oxygen	
5	0.40 m	0.3			.	
6	apart	0.4			. 8.03 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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 4

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	< 0.1			1 Channel Feature :	
2	3.2 m	0.1			2 RIFFLE	10%
3		0.2			3 RUN 10%	POOL 80%
4	measurements	0.2			4 Dissolved Oxygen	
5	0.32 m	0.2			5	
6	apart	0.2			6 8.01	ppm
7		0.1			7 ____	%
8		0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect E 1	wetted width	0.1			12 Channel Feature :	
2	6.0 m	0.2			13 POOL 100%	
3		0.2			14	
4	measurements	0.3			15 Dissolved Oxygen :	
5	0.60 m	0.3			16	
6	apart	0.4			17 6.96	ppm
7		0.4			18 ____	%
8		0.5			19	
9		0.3			20	
10		0.2			21	
					22	
Transect F 1	wetted width	< 0.1			23 Channel Feature :	
2	5.4 m	0.1			24 POOL 100%	
3		0.2			25	
4	measurements	0.3			26 Dissolved Oxygen	
5	0.54 m	0.4			.	
6	apart	0.5			. 7.29	ppm
7		0.6			. ____	%
8		0.5			n	
9		0.3				
10		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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 4

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	0.1			1 Channel Feature:	
2	6.0 m	0.3			2 POOL 100%	
3		0.4			3	
4	measurements	0.3			4 Dissolved Oxygen	
5	0.60 m	0.4			5	
6	apart	0.3			6 7.38 ppm	
7		0.2			7 ___ %	
8		0.4			8	
9		0.3			9	
10		0.2			10	
					11	
Transect H 1	wetted width	0.1			12 Channel Feature:	
2	7.5 m	0.2			13 POOL 100%	
3		0.3			14	
4	measurements	0.4			15 Dissolved Oxygen:	
5	0.75 m	0.6			16	
6	apart	0.7			17 6.40 ppm	
7		0.7			18 ___ %	
9		0.5			19	
9		0.3			20	
10		0.2			21	
					22	
Transect I 1	wetted width	0.1			23 Channel Feature:	
2	6.0 m	0.3			24 POOL 100%	
3		0.4			25	
4	measurements	0.4			26 Dissolved Oxygen	
5	0.60 m	0.3			.	
6	apart	0.3			. 7.54 ppm	
7		0.3			. ___ %	
8		0.2			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. Sci.

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

WBID # 328 Site # H

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect I 1	wetted width	0.1			1 Channel Feature:	
2	4.2 m	0.1			2 POOL 100%	
3		0.2			3	
4	measurements	0.3			4 Dissolved Oxygen	
5	0.42 m	0.2			5	
6	apart	0.1			6 6.95 ppm	
7		0.1			7 — %	
8		0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect K 1	wetted width	0.1			12 Channel Feature:	
2	3.5 m	0.1			13 RUN 100%	
3		0.2			14	
4	measurements	0.2			15 Dissolved Oxygen:	
5	0.35 m	0.2			16	
6	apart	0.2			17 6.70 ppm	
7		0.1			18 — %	
8		0.1			19	
9		0.1			20	
10		<0.1			21	
					22	
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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 5

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

Date & Time: 6/11/07 1414	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ CR PATTON (UPSTREAM)
Personnel (Data Collectors): LUNT & BARTLETT	
Current Weather Conditions: PARTLY CLOUDY, ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CLEAR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.87861 Y: 094.50840

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	± _____ Feet or ± _____ Meters
PDOP		

Photos: → STREAM PHOTO TAKEN BEFORE BOARD PHOTO

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-21,22	TRAN J-K	328-19,20	TRAN B-A		

17,20

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: PATTON RD

% Channel Feature

RUN: 90
RIFFLE:
POOL: 10

*** Page Two – Data Sheet B for WBID # 328 : Site 5**
Stream Morphology:

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

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

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

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

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

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

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

% Cobble	5 % Gravel	65 % Sand	20 % Silt	% Mud/Clay	% Bedrock

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

SPARSE ALGAL GROWTH ON SOLID SUBSTRATES.

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☒ Other: BROWN, TURBID
Bottom Deposit:	☐ Sludge	☒ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☒ Oil	☐ Scum	☐ Foam	☐ None	☒ Other: OIL OR GAS

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: _____ Date of Survey: 6/11/07

Organization: BWR CORP. Position: ENV. SCIENTIST

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

WBID # 328 Site # 5

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	< 0.1			1 Channel Feature:	
2	4.3 m	< 0.1			2 RUN 100%	
3		< 0.1			3	
4	measurements	< 0.1			4 Dissolved Oxygen	
5	0.43 m	0.1			5	
6	apart	0.1			6 9.36 ppm	
7		0.1			7 ____ %	
8		< 0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect B 1	wetted width	< 0.1			12 Channel Feature:	
2	3.7 m	< 0.1			13 POOL 100%	
3		0.1			14	
4	measurements	0.1			15 Dissolved Oxygen:	
5	0.37 m	0.2			16	
6	apart	0.1			17 8.75 ppm	
7		0.1			18 ____ %	
8		< 0.1			19	
9		< 0.1			20	
10		< 0.1			21	
					22	
Transect C 1	wetted width	< 0.1			23 Channel Feature:	
2	2.0 m	< 0.1			24 RUN 100%	
3		< 0.1			25	
4	measurements	< 0.1			26 Dissolved Oxygen	
5	0.20 m	< 0.1			.	
6	apart	< 0.1			. 8.96 ppm	
7		< 0.1			. ____ %	
8		< 0.1			.	
9		< 0.1			n	
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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 5

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	< 0.1			1 Channel Feature:	
2	3.2 m	< 0.1			2 RUN 100%	
3		< 0.1			3	
4	measurements	< 0.1			4 Dissolved Oxygen	
5	0.32 m	< 0.1			5	
6	apart	< 0.1			6 8.63 ppm	
7		< 0.1			7 ___ %	
8		< 0.1			8	
9		< 0.1			9	
10		< 0.1			10	
					11	
Transect E 1	wetted width	< 0.1			12 Channel Feature:	
2	11.0 m	< 0.1			13 RUN 100%	
3		< 0.1			14	
4	measurements	< 0.1			15 Dissolved Oxygen:	
5	0.40 m	< 0.1			16	
6	apart	< 0.1			17 8.63 ppm	
7		< 0.1			18 ___ %	
8		< 0.1			19 8.77	
9		< 0.1			20 PPM	
10		< 0.1			21	
					22	
Transect F 1	wetted width	0.1			23 Channel Feature:	
2	4.5 m	0.3			24 RUN 100%	
3		0.4			25	
4	measurements	0.5			26 Dissolved Oxygen	
5	0.45 m	0.5			.	
6	apart	0.6			. 8.60 ppm	
7		0.7			. ___ %	
8		0.6			n	
9		0.5				
10		0.3				

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

Signed: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 5

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	<0.1			1 Channel Feature:	
2	4.7 m	<0.1			2 RUN 100%	
3		<0.1			3	
4	measurements	<0.1			4 Dissolved Oxygen	
5	0.47 m	0.1			5	
6	apart	0.1			6 8.32 ppm	
7		<0.1			7 — %	
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
Transect H 1	wetted width	<0.1			12 Channel Feature:	
2	5.7 m	0.2			13 RUN 100%	
3		<0.1			14	
4	measurements	<0.1			15 Dissolved Oxygen:	
5	6.52 m	<0.1			16	
6	apart	<0.1			17 8.91 ppm	
7		0.1			18 — %	
8		0.1			19	
9		0.2			20	
10		0.1			21	
					22	
Transect I 1	wetted width	<0.1			23 Channel Feature:	
2	6.0 m	<0.1			24 RUN 100%	
3		<0.1			25	
4	measurements	<0.1			26 Dissolved Oxygen	
5	0.60 m	<0.1			.	
6	apart	<0.1			. 9.10 ppm	
7		<0.1			. — %	
8		<0.1			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.
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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 6/11/07

Organization: RWR CORP. Position: ENV. SCI.

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

WBID # 328 Site # 5

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect 1	1	wetted width	< 0.1			1 Channel Feature:	
	2	2.7 m	< 0.1			2 RUN 100%	
	3		0.1			3	
	4	measurements	0.1			4 Dissolved Oxygen	
	5	0.27 m	0.1			5	
	6	apart	0.1			6 8.82 ppm	
	7		0.1			7 ___ %	
	8		0.1			8	
	9		0.1			9	
	10		0.1			10	
						11	
Transect 2	1	wetted width	< 0.1			12 Channel Feature:	
	2	3.0 m	0.1			13 RUN 100%	
	3		0.1			14	
	4	measurements	< 0.1			15 Dissolved Oxygen:	
	5	0.30 m	0.1			16	
	6	apart	0.1			17 8.98 ppm	
	7		0.1			18 ___ %	
	8		0.1			19	
	9		0.1			20	
	10		< 0.1			21	
						22	
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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 6

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

Date & Time: 6/11/07 1500	Site Location Description (e.g., road crossing): BRIDGE CROSSING AT FRANK ROSS RD. (UPSTREAM)
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: PARTLY CLOUDY ~ 75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR / RAIN / CLEAR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.86546 Y: 094.51308

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-23, 24	TRANS J-K	328-23,24	TRANS A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: CR FRANK ROSS

% CHANNEL FEATURE:
RIFFLE: ____
RUN: 90
POOL: 10

*** Page Two – Data Sheet B for WBID # 328 : 6**
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%.)

5 % Cobble	5 % Gravel	60 % Sand	30 % Silt	% Mud/Clay	% Bedrock

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

SOME ALGAL GROWTH ON SAND AND ROCK SUBSTRATES IN SHALLOW AREAS.

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 6

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE:
	2	4.0 m	<0.1			2 RUN 100%	
	3		<0.1			3	
	4	MEASUREMENTS	<0.1			4 DISSOLVED	OXYGEN:
	5	0.40 m	0.1			5 10.87	PPM
	6	APART	<0.1			6 ____	%
	7		<0.1			7	
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
TB	1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE:
	2	2.6 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED	OXYGEN:
	5	0.26 m	<0.1			16	
	6	APART	<0.1			17 11.26	PPM
	7		<0.1			18	
	8		<0.1			19 ____	%
	9		<0.1			20	
	10		<0.1			21	
						22 CHANNEL	FEATURE:
TC	1	WETTED WIDTH	<0.1			23 RUN 100%	
	2	1.0 m	<0.1			24	
	3		0.1			25 DISSOLVED	OXYGEN:
	4	MEASUREMENTS	0.1			26	
	5	0.10 m	0.1			. 11.09	PPM
	6	APART	0.1			.	
	7		0.1			. ____	%
	8		<0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 6

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	0.1			1 CHANNEL	FEATURE:
	2	2.6 M	0.1			2 POOL	100%
	3		0.1			3	
	4	MEASUREMENTS	0.1			4 DISSOLVED	OXYGEN:
	5	0.26 M	0.2			5 10.95	PPM
	6	APART	0.1			6	
	7		0.1			7 ____	%
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
TE	1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE:
	2	3.0 M	<0.1			13 RUN	100%
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED	OXYGEN:
	5	0.30 M	<0.1			16 11.81	PPM
	6	APART	<0.1			17	
	7		<0.1			18 ____	%
	8		<0.1			19	
	9		<0.1			20	
	10		<0.1			21	
						22	
TF	1	WETTED WIDTH	0.1			23 CHANNEL	FEATURE:
	2	2.2 M	0.1			24 RUN	100%
	3		0.1			25	
	4	MEASUREMENTS	0.1			26 DISSOLVED	OXYGEN:
	5	0.22 M	0.1			. 11.57	PPM
	6	APART	0.1			.	
	7		0.1			. ____	%
	8		<0.1			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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 6

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TG	1	WETTED WIDTH	0.1			1 CHANNEL FEATURE:	
	2	2.0 m	0.1			2 RUN 100%	
	3		0.1			3	
	4	MEASUREMENTS	0.7			4 DISSOLVED OXYGEN:	
	5	0.70 m	0.2			5	
	6	APART	0.1			6 11.26	PPM
	7		0.1			7	
	8		0.1			8	%
	9		<0.1			9	
	10		<0.1			10	
						11	
TH	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	3.2 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
	5	0.32 m	<0.1			16	
	6	APART	<0.1			17 11.44	PPM
	7		<0.1			18	
	8		<0.1			19	%
	9		<0.1			20	
	10		<0.1			21	
						22	
TI	1	WETTED WIDTH	<0.1			23 CHANNEL FEATURE:	
	2	2.7 m	<0.1			24 RUN 100%	
	3		<0.1			25	
	4	MEASUREMENTS	<0.1			26 DISSOLVED OXYGEN:	
	5	0.27 m	<0.1			.	
	6	APART	<0.1			. 11.53	PPM
	7		<0.1			.	
	8		<0.1			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: _____ **Date:** 6/11/07

Organization: RWR CORP. Position: ENV. SCIENTIST

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

WBID# 328 SITE# 6

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE :
2	2.8 M	<0.1			2 RUN 100%	
3		<0.1			3	
4	MEASUREMENTS	<0.1			4 DISSOLVED	OXYGEN:
5	0.28 M	<0.1			5 11.24	PPM
6	APART	<0.1			6	
7		<0.1			7 ____	%
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE :
2	2.0 M	<0.1			13 RUN 100%	
3		<0.1			14	
4	MEASUREMENTS	<0.1			15 DISSOLVED	OXYGEN:
5	0.70 M	0.1			16	
6	APART	0.1			17 11.71	PPM
7		<0.1			18	
8		0.1			19 ____	%
9		<0.1			20	
10		<0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/11/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 7

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

Date & Time: 6/12/07 845	Site Location Description (e.g., road crossing): ROAD CROSSING @ [illegible] HWY O - UPSTREAM
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: CLEAR ~70°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.82165 Y: 094.52976

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-3,4	TRANS J-K	328-1,2	TRANS A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: ROAD HWY O

% CHANNEL FEATURE:
RIFFLE: ____
RUN: 100
POOL: ____

*** Page Two – Data Sheet B for WBID # 328 : 7**
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	15 % Gravel	80% Sand	5 % Silt	% Mud/Clay	% Bedrock

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

NO MACROPHYTES OBSERVED, SOME ALGAL GROWTH ON SAND IN SHALLOW AREAS.

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: EWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 7

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
	2	2.6 m	<0.1		2	RUN 100%	
	3		<0.1		3		
	4	MEASUREMENTS	<0.1		4	DISSOLVED	OXYGEN:
	5	0.76 m	<0.1		5	9.80	PPM
	6	APART	<0.1		6		%
	7		<0.1		7		
	8		<0.1		8		
	9		<0.1		9		
	10		<0.1		10		
					11		
TB	1	WETTED WIDTH	<0.1		12	CHANNEL	FEATURE:
	2	3.5 m	<0.1		13	RUN 100%	
	3		<0.1		14		
	4	MEASUREMENTS	<0.1		15	DISSOLVED	OXYGEN:
	5	0.35 m	<0.1		16		
	6	APART	<0.1		17	9.11	PPM
	7		<0.1		18		
	8		<0.1		19		%
	9		<0.1		20		
	10		<0.1		21		
					22	CHANNEL	FEATURE:
TC	1	WETTED WIDTH	<0.1		23	RUN 100%	
	2	4.6 m	<0.1		24		
	3		<0.1		25	DISSOLVED	OXYGEN:
	4	MEASUREMENTS	<0.1		26		
	5	0.46 m	<0.1		.	9.04	PPM
	6	APART	<0.1		.		
	7		<0.1		.		%
	8		<0.1		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: _____ **Date:** 6/12/07

Organization: EWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE # 7

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
T_D	1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE:
	2	3.0 m	<0.1			2 RUN	100%
	3		<0.1			3	
	4	MEASUREMENTS	<0.1			4 DISSOLVED	OXYGEN:
	5	1m m	<0.1			5 8.91	PPM
	6	APART	<0.1			6	
	7		<0.1			7 ____	%
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
T_E	1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE:
	2	3.6 m	<0.1			13 RUN	100%
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED	OXYGEN:
	5	0.36 m	<0.1			16 8.97	PPM
	6	APART	<0.1			17	
	7		<0.1			18 ____	%
	8		<0.1			19	
	9		<0.1			20	
	10		<0.1			21	
						22	
T_F	1	WETTED WIDTH	<0.1			23 CHANNEL	FEATURE:
	2	4.0 m	<0.1			24 RUN	100%
	3		0.1			25	
	4	MEASUREMENTS	0.1			26 DISSOLVED	OXYGEN:
	5	0.40 m	<0.1			. 9.12	PPM
	6	APART	<0.1			.	
	7		<0.1			. ____	%
	8		<0.1			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.
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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 7

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TG	1	WETTED WIDTH	0.1			1 CHANNEL FEATURE:	
	2	3.9 m	0.1			2 RUN 100%	
	3		<0.1			3	
	4	MEASUREMENTS	<0.1			4 DISSOLVED OXYGEN:	
	5	0.38 m	<0.1			5	
	6	APART	<0.1			6 8.87	PPM
	7		<0.1			7	
	8		<0.1			8 ____	%
	9		<0.1			9	
	10		<0.1			10	
						11	
TH	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	1.5 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
	5	0.15 m	<0.1			16	
	6	APART	<0.1			17 8.84	PPM
	7		<0.1			18	
	8		<0.1			19 ____	%
	9		<0.1			20	
	10					21	
						22	
TI	1	WETTED WIDTH	0.1			23 CHANNEL FEATURE:	
	2	2.0 m	0.1			24 RUN 100%	
	3		0.1			25	
	4	MEASUREMENTS	0.1			26 DISSOLVED OXYGEN:	
	5	0.10 m	0.1			.	
	6	APART	<0.1			. 8.94	PPM
	7		<0.1			.	
	8		<0.1			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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 7

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE :
2	1.7 M	<0.1			2 RUN 100%	
3		<0.1			3	
4	MEASUREMENTS	0.1			4 DISSOLVED OXYGEN:	
5	0.17 M	0.1			5 8.51	PPM
6	APART	0.1			6	
7		0.1			7 ____	%
8		<0.1			8	
9		<0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE :	
2	1.5 M	<0.1			13 RUN 100%	
3		0.1			14	
4	MEASUREMENTS	0.2			15 DISSOLVED OXYGEN:	
5	0.15 M	0.2			16	
6	APART	0.2			17 8.39	PPM
7		0.1			18	
8		0.1			19 ____	%
9		<0.1			20	
10		<0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 8

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

Date & Time: 06-12-07 9:51 a.m	Site Location Description (e.g., road crossing): (UPSTREAM) Bridge Crossing @ Grindley Rd (South of Clarksdale)
Personnel (Data Collectors): Bartlett & Lund	
Current Weather Conditions: Sunny, 75°F	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: Rain/Cloudy	Permit Number: MO0117161, MO049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.80874 Y: 094.54398

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	± _____ Feet or ± _____ Meters
PDOP		

Photos: BOARD READS 'DOWNSTREAM' IN FIRST 2 UPSTREAM PHOTOS - 2 SUBSEQUENT PHOT

Upstream Photos		Downstream Photos		Other Photos ARE COR.	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-7,8, 9,10 5,6	TRANS-K	328-5,6	TRANS-A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: GRINDLEY RD

% CHANNEL FEATURE:
RIFFLE : ____
RUN : 100
POOL : ____

*** Page Two – Data Sheet B for WBID #** 328 : 8

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	30 % Gravel	65 % Sand	5 % Silt	% Mud/Clay	% Bedrock

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

SOME ALGAL GROWTH ON SAND IN SHALLOW AREAS; MACROPHYTES PRESENT ALONG BOTH BANK (ARROWHEAD=SPARSE)

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 8

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
	2	4.5 m	<0.1		2	RUN 100%	
	3		<0.1		3		
	4	MEASUREMENTS	<0.1		4	DISSOLVED	OXYGEN:
	5	0.45 m	<0.1		5	8.55	PPM
	6	APART	<0.1		6	____	%
	7		<0.1		7		
	8		<0.1		8		
	9		<0.1		9		
	10		<0.1		10		
					11		
TB	1	WETTED WIDTH	<0.1		12	CHANNEL	FEATURE:
	2	5.0 m	<0.1		13	RUN 100%	
	3		0.1		14		
	4	MEASUREMENTS	<0.1		15	DISSOLVED	OXYGEN:
	5	0.50 m	0.1		16		
	6	APART	<0.1		17	8.73	PPM
	7		<0.1		18		
	8		<0.1		19	____	%
	9		<0.1		20		
	10		<0.1		21		
					22	CHANNEL	FEATURE:
TC	1	WETTED WIDTH	0.1		23	RUN 100%	
	2	3.2 m	<0.1		24		
	3		<0.1		25	DISSOLVED	OXYGEN:
	4	MEASUREMENTS	0.1		26		
	5	0.32 m	0.1		.	8.41	PPM
	6	APART	0.1		.		
	7		0.1		.	____	%
	8		0.1		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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE # 8

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
T_D	1	WETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
	2	3.0 M	<0.1		2	RUN	100%
	3		<0.1		3		
	4	MEASUREMENTS	<0.1		4	DISSOLVED OXYGEN:	
	5	0.30 M	<0.1		5	8.27	PPM
	6	APART	<0.1		6		
	7		<0.1		7		%
	8		<0.1		8		
	9		<0.1		9		
	10		<0.1		10		
					11		
T_E	1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:	
	2	2.5 M	<0.1		13	RUN 100%	
	3		<0.1		14		
	4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:	
	5	0.75 M	0.1		16	8.27	PPM
	6	APART	0.1		17		
	7		0.1		18		%
	8		0.1		19		
	9		<0.1		20		
	10		<0.1		21		
					22		
T_F	1	WETTED WIDTH	<0.1		23	CHANNEL FEATURE:	
	2	2.8 M	<0.1		24	RUN 100%	
	3		<0.1		25		
	4	MEASUREMENTS	<0.1		26	DISSOLVED OXYGEN:	
	5	0.28 M	<0.1		.	8.20	PPM
	6	APART	<0.1		.		
	7		<0.1		.		%
	8		<0.1		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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 8

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TG	1	WETTED WIDTH	<0.1			1 CHANNEL FEATURE:	
	2	1.5 m	<0.1			2 RUN 100%	
	3		0.1			3	
	4	MEASUREMENTS	0.1			4 DISSOLVED OXYGEN:	
	5	0.15 m	0.1			5	
	6	APART	0.1			6 8.13	PPM
	7		0.1			7	
	8		0.1			8	%
	9		<0.1			9	
	10		<0.1			10	
						11	
TH	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	2.6 m	<0.1			13 RUN 100%	
	3		0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
	5	0.76 m	0.1			16	
	6	APART	0.1			17 8.04	PPM
	7		0.1			18	
	8		<0.1			19	%
	9		<0.1			20	
	10		<0.1			21	
						22	
TI	1	WETTED WIDTH	<0.1			23 CHANNEL FEATURE:	
	2	2.0 m	<0.1			24 RUN 100%	
	3		<0.1			25	
	4	MEASUREMENTS	0.1			26 DISSOLVED OXYGEN:	
	5	0.70 m	0.1			.	
	6	APART	0.1			. 7.97	PPM
	7		<0.1			.	
	8		0.1			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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 8

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE:
2	1.7 M	<0.1			2 RUN 100%	
3		<0.1			3	
4	MEASUREMENTS	<0.1			4 DISSOLVED OXYGEN:	
5	0.17 M	<0.1			5 7.67	PPM
6	APART	0.1			6	
7		0.1			7 ____	%
8		0.1			8	
9		0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
2	1.0 M	<0.1			13 RUN 100%	
3		<0.1			14	
4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
5	0.10 M	<0.1			16	
6	APART	<0.1			17 7.81	PPM
7		<0.1			18	
8		<0.1			19 ____	%
9		0.1			20	
10		0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 9

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

Date & Time: 06-12-07 10:30 a.m.	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ TAYLOR RD.
Personnel (Data Collectors): Bartlett & Lunt	
Current Weather Conditions: Sunny; 75°F	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: Rain/cloudy	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.80516 Y: 094.55217

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-13,14	TRAN J-K	328-11,12	TRAN B-A		

11/12

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: TAYLOR RD.

% CHANNEL FEATURE:
RIFFLE: ____
RUN: 75
POOL: 25

*** Page Two – Data Sheet B for WBID # 328 : 9**

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	30 % Gravel	60 % Sand	10 % Silt	% Mud/Clay	% Bedrock

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

SOME MACROPHYTE GROWTH ON BANKS; ALGAL GROWTH ON SAND IN SHALLOW AREAS

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 9

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	0.1			1 CHANNEL	FEATURE:
	2	6.0 m	0.2			2 POOL 100%	
	3		0.3			3	
	4	MEASUREMENTS	0.3			4 DISSOLVED	OXYGEN:
	5	0.60 m	0.4			5 7.55	PPM
	6	APART	0.5			6 ____	%
	7		0.7			7	
	8		0.7			8	
	9		0.7			9	
	10		0.5			10	
						11	
TB	1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE:
	2	4.0 m	0.1			13 RUN 100%	
	3		0.2			14	
	4	MEASUREMENTS	0.2			15 DISSOLVED	OXYGEN:
	5	0.40 m	0.2			16	
	6	APART	0.2			17 7.97	PPM
	7		0.2			18	
	8		0.2			19 ____	%
	9		0.1			20	
	10		<0.1			21	
						22 CHANNEL	FEATURE:
TC	1	WETTED WIDTH	<0.1			23 POOL	
	2	2.3 m	<0.1			24 RUN 100%	
	3		<0.1			25 DISSOLVED	OXYGEN:
	4	MEASUREMENTS	<0.1			26	
	5	0.23 m	<0.1			. 7.94	PPM
	6	APART	<0.1			.	
	7		<0.1			. ____	%
	8		0.1			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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 9

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	< 0.1		1	CHANNEL	FEATURE:
	2	3.0 M	< 0.1		2	RUN 100%	
	3		< 0.1		3		
	4	MEASUREMENTS	< 0.1		4	DISSOLVED OXYGEN:	
	5	0.30 M	< 0.1		5	8.03	PPM
	6	APART	< 0.1		6		
	7		< 0.1		7		%
	8		< 0.1		8		
	9		< 0.1		9		
	10		< 0.1		10		
					11		
TE	1	WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:	
	2	2.8 M	< 0.1		13	RUN 100%	
	3		< 0.1		14		
	4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:	
	5	0.28 M	0.1		16	7.71	PPM
	6	APART	0.1		17		
	7		0.1		18		%
	8		0.1		19		
	9		0.1		20		
	10		0.1		21		
					22		
TF	1	WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:	
	2	5.0 M	0.1		24	POOL	50%
	3		0.1		25	RUN	50%
	4	MEASUREMENTS	0.2		26	DISSOLVED OXYGEN:	
	5	0.50 M	0.2		.	7.74	PPM
	6	APART	0.3		.		
	7		0.3		.		%
	8		0.3		n		
	9		0.2				
	10		0.2				

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

Signed: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 9

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
T G	1	WETTED WIDTH	0.1			1 CHANNEL FEATURE:	
	2	10.4 m	0.1			2 POOL 100%	
	3		0.3			3	
	4	MEASUREMENTS	0.4			4 DISSOLVED OXYGEN:	
	5	1.04 m	0.5			5	
	6	APART	0.6			6 7.27	PPM
	7		0.8			7	
	8		0.6			8 ____	%
	9		0.5			9	
	10		0.3			10	
						11	
T H	1	WETTED WIDTH	0.2			12 CHANNEL FEATURE:	
	2	11.0 m	0.5			13 POOL 100%	
	3		0.8			14	
	4	MEASUREMENTS	0.8			15 DISSOLVED OXYGEN:	
	5	1.10 m	0.9			16	
	6	APART	0.8			17 7.17	PPM
	7		0.7			18	
	8		0.5			19 ____	%
	9		0.4			20	
	10		0.2			21	
						22	
T I	1	WETTED WIDTH	0.1			23 CHANNEL FEATURE:	
	2	4.6 m	0.2			24 RUN 100%	
	3		0.2			25	
	4	MEASUREMENTS	0.3			26 DISSOLVED OXYGEN:	
	5	0.46 m	0.3			.	
	6	APART	0.2			. 8.15	PPM
	7		0.1			.	
	8		0.1			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: _____ **Date:** 6/12/07

Organization: KWR CORP. Position: ENV. Sci.

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

WBID# 328 SITE# 9

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE :
2	2.5 M	<0.1			2 RUN 100%	
3		<0.1			3	
4	MEASUREMENTS	0.1			4 DISSOLVED OXYGEN:	
5	0.25 M	0.1			5 8.20	PPM
6	APART	0.1			6	
7		0.1			7 ____	%
8		0.1			8	
9		0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE :	
2	3.0 M	<0.1			13 RUN 100%	
3		<0.1			14	
4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
5	0.30 M	<0.1			16	
6	APART	<0.1			17 8.03	PPM
7		<0.1			18	
8		<0.1			19 ____	%
9		<0.1			20	
10		<0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 10

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

Date & Time: 6/12/07 1115	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ HWY 31/6 (UPSTREAM)
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CL.	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.79933 Y: 094.56443

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-17,18	TRAN J-K	328-15,16	TRAN B-A		

15,16

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: HWY 31/6

% CHANNEL FEATURE:
RIFFLE : ____
RUN : 80
POOL : 20

*** Page Two – Data Sheet B for WBID #** 328 : 10

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
	20	70	10		

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

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 10

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	0.1		1	CHANNEL	FEATURE:
	2	9.8 m	0.3		2	POOL 100%	
	3		0.5		3		
	4	MEASUREMENTS	0.6		4	DISSOLVED	OXYGEN:
	5	0.98 m	0.8		5	8.21	PPM
	6	APART	0.9		6	____	%
	7		0.9		7		
	8		0.8		8		
	9		0.6		9		
	10		0.3		10		
					11		
TB	1	WETTED WIDTH	0.1		12	CHANNEL	FEATURE:
	2	9.0 m	0.2		13	POOL	100%
	3		0.2		14		
	4	MEASUREMENTS	0.3		15	DISSOLVED	OXYGEN:
	5	0.90 m	0.2		16		
	6	APART	0.2		17	9.06	PPM
	7		0.2		18		
	8		0.3		19	____	%
	9		0.2		20		
	10		0.1		21		
					22	CHANNEL	FEATURE:
TC	1	WETTED WIDTH	0.1		23	RUN	100%
	2	8.7 m	0.2		24		
	3		0.2		25	DISSOLVED	OXYGEN:
	4	MEASUREMENTS	0.3		26		
	5	0.87 m	0.7		.	8.74	PPM
	6	APART	0.3		.		
	7		0.2		.	____	%
	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: _____ **Date:** 6/12/07

Organization: RWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE # 10

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
T_D	1	WETTED WIDTH	0.1			1 CHANNEL	FEATURE:
	2	6.5 m	0.2			2 POOL 75%	
	3		0.2			3 RUN 25%	
	4	MEASUREMENTS	0.2			4 DISSOLVED OXYGEN:	
	5	0.65 m	0.3			5 8.52	PPM
	6	APART	0.4			6	
	7		0.4			7 ____	%
	8		0.5			8	
	9		0.5			9	
	10		0.4			10	
						11	
T_E	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	3.0 m	0.1			13 RUN 100%	
	3		0.2			14	
	4	MEASUREMENTS	0.2			15 DISSOLVED OXYGEN:	
	5	0.30 m	0.3			16 8.82	PPM
	6	APART	0.4			17	
	7		0.4			18 ____	%
	8		0.3			19	
	9		0.2			20	
	10		0.1			21	
						22	
T_F	1	WETTED WIDTH	<0.1			23 CHANNEL FEATURE:	
	2	4.2 m	<0.1			24 RUN 100%	
	3		0.1			25	
	4	MEASUREMENTS	0.1			26 DISSOLVED OXYGEN:	
	5	0.42 m	0.1			. 8.63	PPM
	6	APART	0.1			.	
	7		0.1			. ____	%
	8		0.1			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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 10

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TG	1	WETTED WIDTH	0.2			1 CHANNEL FEATURE:	
	2	2.0 m	0.2			2 RUN 100%	
	3		0.1			3	
	4	MEASUREMENTS	<0.1			4 DISSOLVED OXYGEN:	
	5	0.20 m	<0.1			5	
	6	APART	<0.1			6 8.70	PPM
	7		<0.1			7	
	8		0.2			8 ____	%
	9		0.2			9	
	10		0.1			10	
						11	
TH	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	2.5 m	<0.1			13 RUN 100%	
	3		<0.1			14	
	4	MEASUREMENTS	<0.1			15 DISSOLVED OXYGEN:	
	5	0.25 m	<0.1			16	
	6	APART	<0.1			17 8.89	PPM
	7		<0.1			18	
	8		<0.1			19 ____	%
	9		<0.1			20	
	10		<0.1			21	
						22	
TI	1	WETTED WIDTH	<0.1			23 CHANNEL FEATURE:	
	2	4.0 m	<0.1			24 RUN 100%	
	3		<0.1			25	
	4	MEASUREMENTS	<0.1			26 DISSOLVED OXYGEN:	
	5	0.40 m	<0.1			.	
	6	APART	<0.1			. 8.60	PPM
	7		<0.1			.	
	8		<0.1			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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 10

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	0.1			1 CHANNEL	FEATURE :
2	3.0 M	0.2			2 RUN 100%	
3		0.2			3	
4	MEASUREMENTS	0.3			4 DISSOLVED	OXYGEN:
5	0.30 M	0.3			5 8.39	PPM
6	APART	0.3			6	
7		0.3			7 ____	%
8		0.4			8	
9		<0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE :
2	8/9/13.5 M	0.1			13 RUN 100%	
3	3.5 M	0.2			14	
4	MEASUREMENTS	0.2			15 DISSOLVED	OXYGEN:
5	0.35 M	0.2			16	
6	APART	0.2			17 8.51	PPM
7		0.1			18	
8		0.1			19 ____	%
9		<0.1			20	
10		<0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/17/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 11

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

Date & Time: 6/12/07 1200	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ ROGERS RD. (UPSTREAM)
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST, ~75°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CL.	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.77827 Y: 094.59306

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-21,22	TRAN J-K	329;19,20	TRAN B-A		

19,20

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: ROGERS RD

% CHANNEL FEATURE:
RIFFLE: ____
RUN: 25
POOL: 75

*** Page Two – Data Sheet B for WBID #** 328 : 11

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
	5	15	60	20	

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

SOME ALGAL GROWTH ON SANDY SUBSTRATE IN SHALLOW AREAS

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 11

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
	2	5.0 m	<0.1		2	RUN 100%.	
	3		<0.1		3		
	4	MEASUREMENTS	<0.1		4	DISSOLVED	OXYGEN:
	5	0.50 m	<0.1		5	9.83	PPM
	6	APART	<0.1		6		%
	7		<0.1		7		
	8		0.1		8		
	9		0.1		9		
	10		<0.1		10		
					11		
TB	1	WETTED WIDTH	<0.1		12	CHANNEL	FEATURE:
	2	7.3 m	<0.1		13	POOL 100%.	
	3		0.1		14		
	4	MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:	
	5	0.73 m	0.3		16		
	6	APART	0.5		17	9.34	PPM
	7		0.6		18		
	8		0.5		19		%
	9		0.3		20		
	10		0.2		21		
					22	CHANNEL	FEATURE:
TC	1	WETTED WIDTH	<0.1		23	RUN	100%.
	2	3.0 m	0.1		24		
	3		0.1		25	DISSOLVED	OXYGEN:
	4	MEASUREMENTS	0.1		26		
	5	0.30 m	0.1		.	9.991	PPM
	6	APART	0.1		.		
	7		0.1		.		%
	8		0.1		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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE # 11

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE:
	2	4.2 M	<0.1			2 RUN	100%.
	3		0.1			3	
	4	MEASUREMENTS	0.1			4 DISSOLVED	OXYGEN:
	5	0.42 M	0.1			5 9.76	PPM
	6	APART	0.1			6	
	7		0.1			7 ____	%
	8		<0.1			8	
	9		<0.1			9	
	10		<0.1			10	
						11	
TE	1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE:
	2	5.0 M	0.1			13 POOL	100%.
	3		0.2			14	
	4	MEASUREMENTS	0.3			15 DISSOLVED	OXYGEN:
	5	0.50 M	0.2			16 9.81	PPM
	6	APART	0.1			17	
	7		<0.1			18 ____	%
	8		<0.1			19	
	9		<0.1			20	
	10		<0.1			21	
						22	
TF	1	WETTED WIDTH	0.1			23 CHANNEL	FEATURE:
	2	7.2 M	0.2			24 POOL	100%.
	3		0.2			25	
	4	MEASUREMENTS	0.4			26 DISSOLVED	OXYGEN:
	5	0.72 M	0.4			. 9.68	PPM
	6	APART	0.4			.	
	7		0.3			. ____	%
	8		0.3			n	
	9		0.2				
	10		0.1				

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Signed: _____ **Date:** 6/12/07

Organization: BWR. CORP. Position: ENV. SCI

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

WBID# 328 SITE# 11

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
T_G	1	WETTED WIDTH	0.1			1 CHANNEL FEATURE:	
	2	6.7 m	0.4			2 POOL 100%	
	3		0.5			3	
	4	MEASUREMENTS	0.5			4 DISSOLVED OXYGEN:	
	5	0.67 m	0.5			5	
	6	APART	0.7			6 9.57	PPM
	7		0.7			7	
	8		0.6			8 ____	%
	9		0.5			9	
	10		0.4			10	
						11	
T_H	1	WETTED WIDTH	0.2			12 CHANNEL FEATURE:	
	2	4.1 m	0.4			13 POOL 100%	
	3		0.5			14	
	4	MEASUREMENTS	0.7			15 DISSOLVED OXYGEN:	
	5	0.41 m	0.6			16	
	6	APART	0.4			17 9.67	PPM
	7		0.4			18	
	8		0.1			19 ____	%
	9		0.1			20	
	10		<0.1			21	
						22	
T_I	1	WETTED WIDTH	0.1			23 CHANNEL FEATURE:	
	2	3.6 m	0.4			24 POOL 100%	
	3		0.4			25	
	4	MEASUREMENTS	0.3			26 DISSOLVED OXYGEN:	
	5	0.36 m	0.3			.	
	6	APART	0.3			. 9.49	PPM
	7		0.2			.	
	8		0.1			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: _____ **Date:** 6/12/07

Organization: BWF CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 11

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	0.4			1 CHANNEL	FEATURE :
2	6.3M	0.7			2 POOL 100%	
3		0.9			3	
4	MEASUREMENTS	0.1			4 DISSOLVED OXYGEN:	
5	0.63 M	0.1			5 9.79	PPM
6	APART	0.9			6	
7		0.5			7 ____	%
8		0.2			8	
9		0.1			9	
10		0.1			10	
					11	
TK 1	WETTED WIDTH	0.2			12 CHANNEL FEATURE :	
2	9.8 M	0.7			13 POOL 100%	
3		>1.0			14	
4	MEASUREMENTS	>1.0			15 DISSOLVED OXYGEN:	
5	0.98 M	>1.0			16	
6	APART	>1.0			17 9.22	PPM
7		>1.0			18	
8		0.9			19 ____	%
9		0.7			20	
10		0.4			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 328
Site# 12

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

Date & Time: 6/12/07 1300	Site Location Description (e.g., road crossing): BRIDGE CROSSING @ 135th ST.
Personnel (Data Collectors): BARTLETT & LUNT	
Current Weather Conditions: OVERCAST ~80°	Facility Name: CLARKSDALE WWTF, KING CITY LAGOON
Weather Conditions for Past 10 days: FAIR/RAIN/CL.	Permit Number: MO0117161, MO0049662
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 39.77375 Y: 094.62073

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	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
328-23,24	TRAN. J-K	328-25,26	TRAN. B-A		

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

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ 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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☒ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: 135th St.

% CHANNEL FEATURE:
RIFFLE: 10
RUN: 85
POOL: 5

*** Page Two – Data Sheet B for WBID # 328 :**
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	20% Gravel	75% Sand	5 % Silt	% Mud/Clay	% Bedrock

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

CONSIDERABLE PERIPHYTON GROWTH ON SAND & ROCK SUBSTRATES.

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam	☐ None	☐ 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: _____ Date of Survey: 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 328 SITE # 12

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TA	1	WETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
	2	4.5 m	0.1		2	RUN	100%
	3		0.1		3		
	4	MEASUREMENTS	0.1		4	DISSOLVED	OXYGEN:
	5	0.45 m	<0.1		5	10.09	PPM
	6	APART	0.1		6		%
	7		<0.1		7		
	8		<0.1		8		
	9		<0.1		9		
	10		<0.1		10		
					11		
TB	1	WETTED WIDTH	<0.1		12	CHANNEL	FEATURE:
	2	2.3 m	<0.1		13	RUN	100%
	3		<0.1		14		
	4	MEASUREMENTS	0.1		15	DISSOLVED	OXYGEN:
	5	0.21 m	0.1		16		
	6	APART	0.1		17	12.18	PPM
	7		0.1		18		
	8		0.1		19		%
	9		0.1		20		
	10		0.1		21		
					22	CHANNEL	FEATURE:
TC	1	WETTED WIDTH	<0.1		23	RUN	100%
	2	[illegible] m	<0.1		24		
	3	6.3	<0.1		25	DISSOLVED	OXYGEN:
	4	MEASUREMENTS	<0.1		26		
	5	[illegible] m	<0.1		.	11.96	PPM
	6	APART	<0.1		.		
	7	0.63	<0.1		.		%
	8		<0.1		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:** 6/12/07

Organization: BJR CORP. Position: ENV. SCI.

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

WBID# 328 SITE # 12

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:	
	2	3.7 M	<0.1		2	RUN 100%	
	3		0.1		3		
	4	MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:	
	5	0.37 M	0.1		5	12.31 PPM	
	6	APART	0.1		6		
	7		<0.1		7	____ %	
	8		<0.1		8		
	9		<0.1		9		
	10		<0.1		10		
					11		
TE	1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:	
	2	3.5 M	<0.1		13	RUN 100%	
	3		<0.1		14		
	4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:	
	5	0.35 M	0.1		16	12.01 PPM	
	6	APART	0.1		17		
	7		0.1		18	____ %	
	8		0.1		19		
	9		<0.1		20		
	10		<0.1		21		
					22		
TF	1	WETTED WIDTH	0.1		23	CHANNEL FEATURE:	
	2	2.0 M	0.1		24	RUN 100%	
	3		0.1		25		
	4	MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:	
	5	0.20 M	0.1		.	12.36 PPM	
	6	APART	0.1		.		
	7		0.1		.	____ %	
	8		0.1		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: _____ **Date:** 6/12/03

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 12

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TG	1	WETTED WIDTH	<0.1			1 CHANNEL FEATURE:	
	2	4.6 m	<0.1			2 RUN 100%	
	3		<0.1			3	
	4	MEASUREMENTS	<0.1			4 DISSOLVED OXYGEN:	
	5	0.46 m	<0.1			5	
	6	APART	0.1			6 12.26	PPM
	7		0.1			7	
	8		0.1			8	%
	9		0.1			9	
	10		<0.1			10	
						11	
TH	1	WETTED WIDTH	<0.1			12 CHANNEL FEATURE:	
	2	2.3 m	<0.1			13 RUN 100%	
	3		0.1			14	
	4	MEASUREMENTS	0.2			15 DISSOLVED OXYGEN:	
	5	0.23 m	0.2			16	
	6	APART	0.2			17 12.01	PPM
	7		0.3			18	
	8		0.3			19	%
	9		0.2			20	
	10		0.2			21	
						22	
TI	1	WETTED WIDTH	<0.1			23 CHANNEL FEATURE:	
	2	4.0 m	<0.1			24 RUN 100%	
	3		<0.1			25	
	4	MEASUREMENTS	<0.1			26 DISSOLVED OXYGEN:	
	5	0.40 m	<0.1			.	
	6	APART	0.1			. 12.32	PPM
	7		0.1			.	
	8		0.2			n	%
	9		0.2				
	10		0.2				

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

Signed: _____ **Date:** 6/12/07

Organization: EWR CORP. Position: ENV. SCI.

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

WBID# 328 SITE# 12

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1			1 CHANNEL	FEATURE :
2	3.6 M	0.1			2 RIFFLE	50
3		0.2			3 RUN 50%	
4	MEASUREMENTS	0.2			4 DISSOLVED	OXYGEN:
5	0.36 M	0.2			5 12.35	PPM
6	APART	0.3			6	
7		0.2			7 ____	%
8		0.2			8	
9		<0.1			9	
10		<0.1			10	
					11	
TK 1	WETTED WIDTH	<0.1			12 CHANNEL	FEATURE :
2	4.2 M	<0.1			13 RIFFLE	15%
3		0.1			14 POOL 65%	RUN 20%
4	MEASUREMENTS	0.2			15 DISSOLVED	OXYGEN:
5	0.42 M	0.1			16	
6	APART	0.1			17 12.19	PPM
7		0.2			18	
8		0.1			19 ____	%
9		0.1			20	
10		0.1			21	
					22	
					23	
					24	
					25	
					26	
					.	
					.	
					.	
					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: _____ **Date:** 6/12/07

Organization: BWR CORP. Position: ENV. SCI.

Downstream (Site 1) of Little Third Fork Platte River

Downstream (Site 1) of Little Third Fork Platte River

Upstream (Site 1) of Little Third Fork Platte River

Upstream (Site 1) of Little Third Fork Platte River

Downstream (Site 2) of Little Third Fork Platte River

Downstream (Site 2) of Little Third Fork Platte River

Upstream (Site 2) of Little Third Fork Platte River

Upstream (Site 2) of Little Third Fork Platte River

Downstream (Site 3) of Little Third Fork Platte River

Downstream (Site 3) of Little Third Fork Platte River

Upstream (Site 3) of Little Third Fork Platte River

Upstream (Site 3) of Little Third Fork Platte River

Downstream (Site 4) of Little Third Fork Platte River

Downstream (Site 4) of Little Third Fork Platte River

Upstream (Site 4) of Little Third Fork Platte River

Upstream (Site 4) of Little Third Fork Platte River

Downstream (Site 5) of Little Third Fork Platte River

Downstream (Site 5) of Little Third Fork Platte River

Upstream (Site 5) of Little Third Fork Platte River

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Downstream (Site 7) of Little Third Fork Platte River

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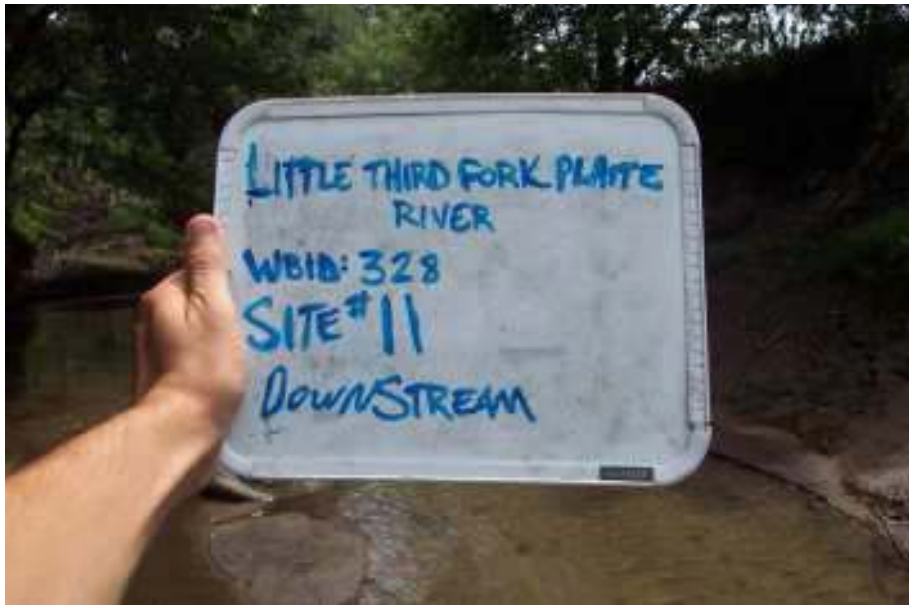
Downstream (Site 10) of Little Third Fork Platte River

Downstream (Site 10) of Little Third Fork Platte River

Upstream (Site 10) of Little Third Fork Platte River

Upstream (Site 10) of Little Third Fork Platte River



Downstream (Site 11) of Little Third Fork Platte River

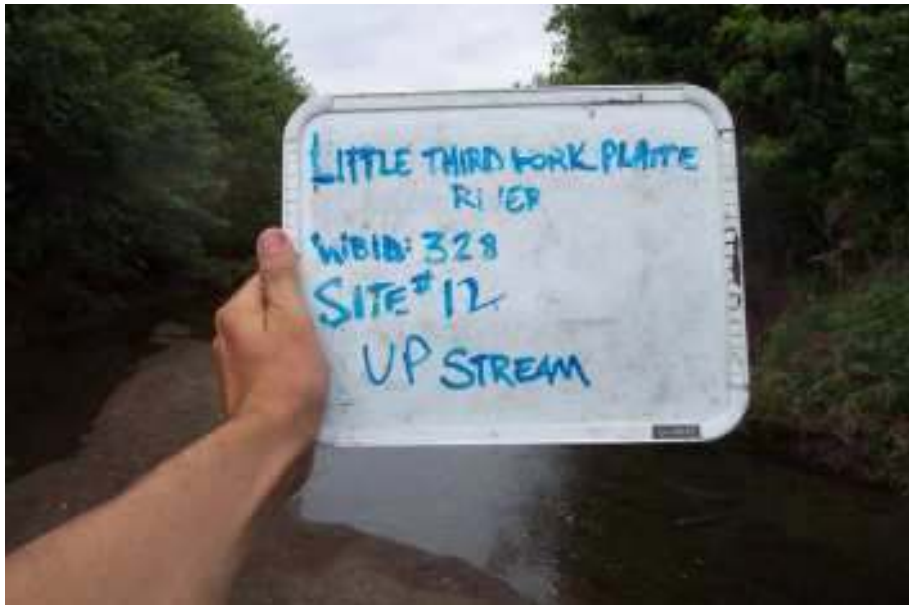
Downstream (Site 11) of Little Third Fork Platte River

Upstream (Site 11) of Little Third Fork Platte River

Upstream (Site 11) of Little Third Fork Platte River

Downstream (Site 12) of Little Third Fork Platte River

Downstream (Site 12) of Little Third Fork Platte River



Upstream (Site 12) of Little Third Fork Platte River

Upstream (Site 12) of Little Third Fork Platte River