



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0327 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): <u>THIRD FORK PLATTE RIVER</u>	
Missouri Water Body Identification (WBID) Number: <u>327</u>	
8-digit HUC: <u>10240012</u>	County: <u>BUCHANAN / DEKALB / GENTRY</u>
Upstream Legal Description (from Table H): <u>25, 61N, 33W</u>	
Downstream Legal Description (from Table H): <u>MOUTH</u>	
Number of sites evaluated <u>18</u>	
List all sites numbers, listed consequently upstream to downstream: <u>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18</u>	

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

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

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

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

Discharger Facility Name(s):	<u>UNION STAR SEWAGE WW LAGOON NON-POINT</u>
Discharger Permit Number(s):	<u>AO 0096202 N/A</u>

IV. UAA Surveyor (please print legibly)

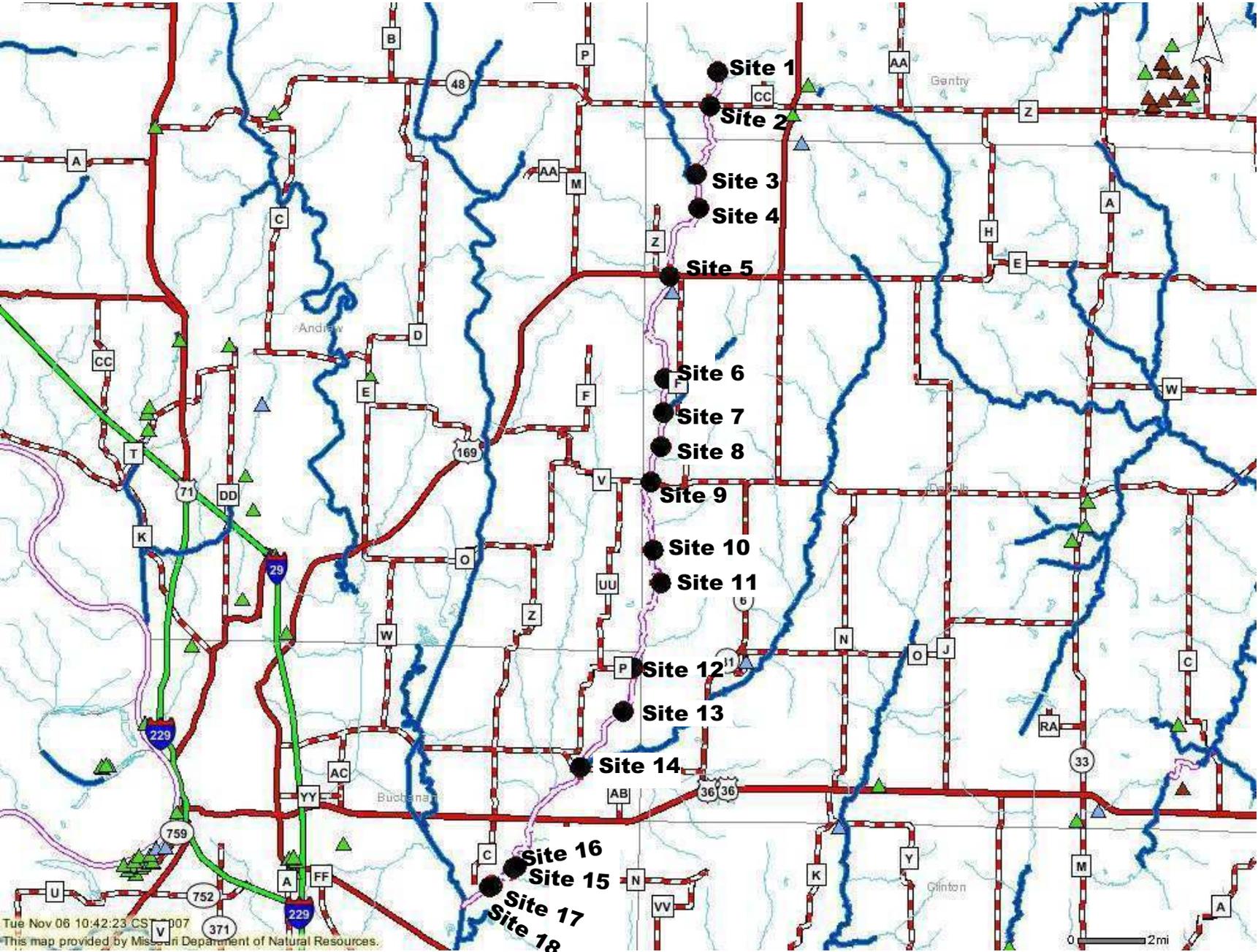
Name of Surveyor: <u>ALEX BARTLETT</u>	Telephone Number: <u>816.363.2696</u>
Organization/Employer: <u>BWR CORPORATION</u>	
Position: <u>ENVIRONMENTAL SCIENTIST / TEAM LEADER</u>	

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

Signed:  Date: 6/08/07

Third Fork Platte River WBID# 0327

UAA# 2557



This map was created by DNR to show all sites on one sheet

WBID# 327
 Site# 1

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

Date & Time: <u>6/6/2007 10:00</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING AT CR 450</u>
Personnel (Data Collectors): <u>BARRETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 70°</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAIN, CLEAR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>40,06825</u>		Y: <u>094,56609</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP			

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-3,4</u>	<u>TRAN J-K</u>	<u>327-1,2</u>	<u>TRAN C-B</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other: <u>1</u>
Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)				

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

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

Indications of Human Use*: (attach photos)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	
Comments: <u>CR 450</u>					

% CHANNEL FEATURE:

RIFFLE : _____

RUN : 50%

POOL : 50%

* Page Two – Data Sheet B for WBID # 327 :
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	<u>50</u> % Silt	<u>50</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/06/07

Organization: BWR CORP. Position: ENV. Sci.

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

WBID # 327 SITE # 1

TA

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE:
2 <u>2.5 m</u>	0.1		2 RUN	100%
3	0.2		3	
4 MEASUREMENTS	0.1		4 DISSOLVED	OXYGEN:
5 <u>0.25 m</u>	0.1		5 <u>9.36</u>	PPM
6 APART	0.1		6	%
7	0.1		7	
8	0.1		8	
9	0.1		9	
10	<0.1		10	

TB

1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE:
2 <u>2.5 m</u>	0.1		13 RUN	100%
3	0.1		14	
4 MEASUREMENTS	0.1		15 DISSOLVED	OXYGEN:
5 <u>0.25 m</u>	0.1		16	
6 APART	0.1		17 <u>9.37</u>	PPM
7	0.1		18	
8	0.1		19	%
9	0.1		20	
10	<0.1		21	

TC

1 WETTED WIDTH	<0.1		22 CHANNEL	FEATURE:
2 <u>2.0 m</u>	0.1		23 RUN	100%
3	0.1		24	
4 MEASUREMENTS	0.1		25 DISSOLVED	OXYGEN:
5 <u>0.2 m</u>	0.1		26	
6 APART	0.1		.	<u>9.25</u> 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: [Signature] Date: 06/06/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	<0.1	1	CHANNEL FEATURE :
	2	<u>1.0</u> m	<0.1	2	RUN 100%
	3		<0.1	3	
	4	MEASUREMENTS	<0.1	4	DISSOLVED OXYGEN :
	5	<u>0.1</u> m	<0.1	5	<u>8.90</u> PPM
	6	APART	<0.1	6	
	7		<0.1	7	%
	8		<0.1	8	
	9		<0.1	9	
	10		<0.1	10	
TE	1	WETTED WIDTH	<0.1	12	CHANNEL FEATURE :
	2	<u>2.5</u> m	<0.1	13	RUN 100%
	3		<0.1	14	
	4	MEASUREMENTS	<0.1	15	DISSOLVED OXYGEN :
	5	<u>0.25</u> m	<0.1	16	<u>9.02</u> PPM
	6	APART	<0.1	17	
	7		<0.1	18	%
	8		<0.1	19	
	9		<0.1	20	
	10		<0.1	21	
TF	1	WETTED WIDTH	<0.1	23	CHANNEL FEATURE :
	2	<u>4.0</u> m	0.1	24	POOL 100%
	3		0.2	25	
	4	MEASUREMENTS	0.2	26	DISSOLVED OXYGEN :
	5	<u>0.40</u> m	0.2	.	<u>8.24</u> PPM
	6	APART	0.2	.	
	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: [Signature]

Date: 06/06/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	0.1		1	CHANNEL FEATURE:
	2 <u>3.2</u> m	0.1		2	POOL 100%
	3	0.2		3	
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.32</u> m	0.2		5	
	6 APART	0.2		6	<u>8.53</u> PPM
	7	0.2		7	
	8	0.2		8	_____ %
	9	0.2		9	
	10	<0.1		10	
T _H	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>3.5</u> m	0.2		13	POOL 100%
	3	0.2		14	
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.35</u> m	0.2		16	
	6 APART	0.2		17	<u>8.55</u> PPM
	7	0.2		18	
	8	0.3		19	_____ %
	9	0.2		20	
	10	0.1		21	
T _I	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>3.2</u> m	0.1		24	POOL 100%
	3	0.2		25	
	4 MEASUREMENTS	0.3		26	DISSOLVED OXYGEN:
	5 <u>0.32</u> m	0.2		.	
	6 APART	0.2		.	<u>8.66</u> PPM
	7	0.2		.	
	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: [Signature] Date: 06/06/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>3.2</u> M	0.1		2 Pool	100%
	3	0.2		3	
	4 MEASUREMENTS	0.2		4 DISSOLVED OXYGEN:	
	5 <u>0.32</u> M	0.2		5 <u>8.78</u>	PPM
	6 APART	0.2		6	
	7	0.2		7	%
	8	0.2		8	
	9	0.2		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	2 <u>3.5</u> M	<0.1		13 Pool	100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15 DISSOLVED OXYGEN:	
	5 <u>0.35</u> M	0.1		16	
	6 APART	0.2		17 <u>9.10</u>	PPM
	7	0.2		18	
	8	0.2		19	%
	9	0.2		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: [Signature]

Date: 06/06/2007

Organization: BWR CORP.

Position: ENV. SCI.

WBID# 327
 Site# 2

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

Date & Time: <u>6/6/07 11:15</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING AT HWY 48 (SITE IS DOWNSTREAM OF BRIDGE)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 75°</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAW, FAIR, CLEAR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>40,05384</u>		Y: <u>094,57085</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE:			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
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
<u>327,5-6</u>	<u>TRAN J-K</u>	<u>327,7-8</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments: MISC. HOUSEHOLD DEBRIS - TRANS C-A (STONE, WATER HEATERS ETC.)

Indications of Human Use*: (attach photos)

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

Comments: HWY 48

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 60%

POOL: 40%

* Page Two – Data Sheet B for WBID # 327 :
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	<u>60</u> % Silt	<u>40</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 2

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1 CHANNEL	FEATURE:
2	<u>3.4</u> m	0.1		2 RUN	100%
3		0.1		3	
4	MEASUREMENTS	0.1		4 DISSOLVED	OXYGEN:
5	<u>0.34</u> m	0.1		5 <u>8.55</u>	PPM
6	APART	<0.1		6	%
7		0.1		7	
8		<0.1		8	
9		<0.1		9	
10		<0.1		10	
				11	
1	WETTED WIDTH	<0.1		12 CHANNEL	FEATURE:
2	<u>4.0</u> m	0.1		13 RUN	100%
3		0.1		14	
4	MEASUREMENTS	0.1		15 DISSOLVED	OXYGEN:
5	<u>0.4</u> m	0.2		16	
6	APART	0.2		17 <u>8.23</u>	PPM
7		0.1		18	
8		0.1		19	%
9		0.1		20	
10		<0.1		21	
				22 CHANNEL	FEATURE:
1	WETTED WIDTH	<0.1		23 RUN	100%
2	<u>2.2</u> m	<0.1		24	
3		0.1		25 DISSOLVED	OXYGEN:
4	MEASUREMENTS	0.1		26	
5	<u>0.22</u> m	0.1		.	<u>8.88</u> PPM
6	APART	0.1		.	
7		0.1		.	%
8		0.1		n	
9		0.1			
10		<0.1			

TB

TC

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: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>2.8</u> m	0.1		2 CHANNEL	WATER
	3	0.1		3 RUN	100%
	4 MEASUREMENTS	0.1		4 DISSOLVED OXYGEN:	
	5 <u>0.28</u> m	0.1		5 <u>8.68</u>	PPM
	6 APART	0.1		6	
	7	0.1		7	%
	8	0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	2 <u>2.3</u> m	0.1		13 RUN	100%
	3	0.2		14	
	4 MEASUREMENTS	0.1		15 DISSOLVED OXYGEN:	
	5 <u>0.23</u> m	0.1		16 <u>8.52</u>	PPM
	6 APART	<0.1		17	
	7	0.1		18	%
	8	<0.1		19	
	9	<0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	<0.1		23 CHANNEL	FEATURE :
	2 <u>4.5</u> m	0.1		24 POOL	100%
	3	0.2		25	
	4 MEASUREMENTS	0.1		26 DISSOLVED OXYGEN:	
	5 <u>0.45</u> m	0.2		. <u>8.16</u>	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: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>2.5</u> m	<0.1		2	RUN 100%
	3	<0.1		3	
	4 MEASUREMENTS	<0.1		4	DISSOLVED OXYGEN:
	5 <u>0.25</u> m	<0.1		5	
	6 APART	<0.1		6	<u>8.54</u> PPM
	7	0.1		7	
	8	0.1		8	
	9	0.2		9	
	10	<0.1		10	
TH	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>4.3</u> m	0.3		13	POOL 100%
	3	0.2		14	
	4 MEASUREMENTS	0.3		15	DISSOLVED OXYGEN:
	5 <u>0.43</u> m	0.3		16	
	6 APART	0.3		17	<u>8.34</u> PPM
	7	0.2		18	
	8	0.2		19	
	9	0.1		20	
	10	<0.1		21	
TI	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>2.2</u> m	0.1		24	POOL 100%
	3	0.2		25	
	4 MEASUREMENTS	0.2		26	DISSOLVED OXYGEN:
	5 <u>0.82</u> m	0.2		.	
	6 APART	0.2		.	<u>9.17</u> 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.

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Signed: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 2

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE :
2	<u>4.3</u> m	0.2		2 POOL	50%
3		0.3		3 R/JN	50%
4	MEASUREMENTS	0.3		4 DISSOLVED OXYGEN :	
5	<u>0.45</u> m	0.2		5 <u>8.44</u>	PPM
6	APART	0.3		6	
7		0.2		7	%
8		0.2		8	
9		0.2		9	
10		< 0.1		10	
				11	
TK 1	WETTED WIDTH	< 0.1		12 CHANNEL	FEATURE :
2	<u>2.0</u> m	0.1		13 RIFFLE	5%
3		0.1		14 R/JN	95%
4	MEASUREMENTS	0.1		15 DISSOLVED OXYGEN :	
5	<u>0.2</u> m	0.1		16	
6	APART	< 0.1		17 <u>9.25</u>	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: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 3

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

Date & Time: <u>6/6/07 12:23</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ NW KING RD. (SITE UPSTREAM FROM BRIDGE)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAIN/FAIR/CL.</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>40.02436</u>		Y: <u>094.57748</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
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
<u>327-14,15</u>	<u>TRAN J-K</u>	<u>327-9,10 11,12,13</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Indications of Human Use*: (attach photos)

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

% CHANNEL FEATURE:

RIFFLE: 5%

RUN: 15%

POOL: 80%

* Page Two – Data Sheet B for WBID # 327 :
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	0% Sand	70% Silt	70% Mud/Clay	% Bedrock
----------	----------	---------	----------	--------------	-----------

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

SPARSE PERIPHATON ON ROCK SUBSTRATE

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 3

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE :
2	<u>5.0 m</u>	0.1		2 RUN	100%
3		0.2		3	
4	MEASUREMENTS	0.2		4 DISSOLVED	OXYGEN :
5	<u>0.50 m</u>	0.1		5 <u>9.54</u>	PPM
6	APART	0.1		6	%
7		0.1		7	
8		0.1		8	
9		< 0.1		9	
10		< 0.1		10	

TB

				11	
1	WETTED WIDTH	0.1		12 CHANNEL	FEATURE :
2	<u>3.4 m</u>	0.6		13 RUN	100%
3		0.7		14	
4	MEASUREMENTS	0.8		15 DISSOLVED	OXYGEN :
5	<u>0.54 m</u>	0.7		16	
6	APART	0.6		17 <u>8.31</u>	PPM
7		0.5		18	
8		0.4		19	%
9		0.2		20	
10		0.1		21	

TC

				22 CHANNEL	FEATURE :
1	WETTED WIDTH	< 0.1		23 POOL	100%
2	<u>4.0 m</u>	0.2		24	
3		0.3		25 DISSOLVED	OXYGEN :
4	MEASUREMENTS	0.4		26	
5	<u>0.4 m</u>	0.4		.	<u>8.34</u> PPM
6	APART	0.4		.	
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.

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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: [Signature]

Date: 6/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE:
	2 <u>4.5</u> m	0.2		2 POOL	100%
	3	0.2		3	
	4 MEASUREMENTS	0.2		4 DISSOLVED OXYGEN:	
	5 <u>0.45</u> m	0.3		5 <u>8.45</u>	PPM
	6 APART	0.3		6	
	7	0.2		7	%
	8	0.2		8	
	9	0.2		9	
	10	0.1		10	
TE	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE:
	2 <u>5.5</u> m	0.1		13 POOL	100%
	3	0.1		14	
	4 MEASUREMENTS	0.2		15 DISSOLVED OXYGEN:	
	5 <u>0.55</u> m	0.3		16 <u>8.78</u>	PPM
	6 APART	0.4		17	
	7	0.3		18	%
	8	0.4		19	
	9	0.3		20	
	10	0.1		21	
TF	1 WETTED WIDTH	<0.1		23 CHANNEL	FEATURE:
	2 <u>2.0</u> m	0.1		24 RUN	100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26 DISSOLVED OXYGEN:	
	5 <u>0.2</u> m	0.2		. <u>8.67</u>	PPM
	6 APART	0.2		.	
	7	0.2		.	%
	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.

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Signed: [Signature]

Date: 6/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>3.4</u> m	0.2		2	POOL 100%
	3	0.2		3	
	4 MEASUREMENTS	0.3		4	DISSOLVED OXYGEN:
	5 <u>0.34</u> m	0.3		5	
	6 APART	0.4		6	<u>8.66</u> PPM
	7	0.3		7	
	8	0.3		8	
	9	0.3		9	
	10	0.1		10	
T _H	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>1.3</u> m	<0.1		13	RUN 100%
	3	<0.1		14	
	4 MEASUREMENTS	<0.1		15	DISSOLVED OXYGEN:
	5 <u>0.13</u> m	0.1		16	
	6 APART	0.1		17	<u>8.91</u> PPM
	7	<0.1		18	
	8	<0.1		19	
	9	<0.1		20	
	10	<0.1		21	
T _I	1 WETTED WIDTH	0.1		23	CHANNEL FEATURE:
	2 <u>4.5</u> m	0.1		24	POOL 20%
	3	0.1		25	RUN 80%
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.45</u> m	<0.1		.	
	6 APART	<0.1		.	<u>8.43</u> 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: [Signature]

Date: 6/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>2.0</u> m	0.1		2 RIFFLE	10%
	3	0.1		3 POOL 10%	RUN 80%
	4 MEASUREMENTS	<0.1		4 DISSOLVED OXYGEN:	
	5 <u>0.2</u> m	<0.1		5 <u>8.47</u>	PPM
	6 APART	0.1		6	
	7	0.1		7	%
	8	<0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	0.1		12 CHANNEL	FEATURE :
	2 <u>2.5</u> m	<0.1		13 POOL	100%
	3	0.2		14	
	4 MEASUREMENTS	0.3		15 DISSOLVED OXYGEN:	
	5 <u>0.25</u> m	0.5		16	
	6 APART	0.4		17 <u>7.79</u>	PPM
	7	0.5		18	
	8	0.5		19	%
	9	0.2		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: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 4

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

Date & Time: <u>6/6/07 13:25</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CR 258 (SITE DOWNSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	Facility Name: <u>NON-POINT</u>
Current Weather Conditions: <u>CLEAR, 75°</u>	Permit Number: <u>N/A</u>
Weather Conditions for Past 10 days: <u>RAIN/FAIR/CLEAR</u>	
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>40.00990</u>		Y: <u>094.57542</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP			

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-16,17</u>	<u>TRANS-K</u>	<u>327-18,19</u>	<u>TRANS-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: CR258

% CHANNEL FEATURE:

RIFFLE : 5%

RUN : 45

POOL : 50

* Page Two – Data Sheet B for WBID # 327 :
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	10 % Sand	40 % Silt	40 % Mud/Clay	% Bedrock
------------	------------	-----------	-----------	---------------	-----------

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

PERIPHYTON WHERE ROCK SUBSTRATE IS PRESENT.

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 4

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>3.0 m</u>	<0.1		2	POOL 100%
3		0.1		3	
4	MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
5	<u>0.30 m</u>	0.1		5	<u>12.27</u> PPM
6	APART	0.2		6	_____ %
7		0.2		7	
8		0.1		8	
9		0.1		9	
10		<0.1		10	
				11	
1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>4.8 m</u>	<0.1		13	RUN 100%
3		<0.1		14	
4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
5	<u>0.42 m</u>	0.1		16	
6	APART	<0.1		17	<u>12.39</u> PPM
7		<0.1		18	
8		<0.1		19	_____ %
9		0.1		20	
10		<0.1		21	
				22	CHANNEL FEATURE:
1	WETTED WIDTH	<0.1		23	POOL 100%
2	<u>5.0 m</u>	<0.1		24	
3		0.1		25	DISSOLVED OXYGEN:
4	MEASUREMENTS	0.1		26	
5	<u>0.50 m</u>	0.1		.	<u>12.14</u> PPM
6	APART	0.1		.	
7		0.1		.	_____ %
8		0.1		n	
9		0.1			
10		0.1			

TB

TC

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: 6/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 4

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE:
	2 <u>4.2</u> m	0.3		2 POOL	100%
	3	0.3		3	
	4 MEASUREMENTS	0.3		4 DISSOLVED OXYGEN:	
	5 <u>0.42</u> m	0.2		5 <u>12.08</u>	PPM
	6 APART	0.1		6	
	7	0.1		7	%
	8	0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	0.1		12 CHANNEL	FEATURE:
	2 <u>4.2</u> m	0.1		13 RUN	100%
	3	0.1		14	
	4 MEASUREMENTS	0.2		15 DISSOLVED OXYGEN:	
	5 <u>0.42</u> m	0.2		16 <u>12.22</u>	PPM
	6 APART	0.2		17	
	7	0.1		18	%
	8	0.1		19	
	9	0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	<0.1		23 CHANNEL	FEATURE:
	2 <u>3.5</u> m	0.1		24 RUN	100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26 DISSOLVED OXYGEN:	
	5 <u>0.35</u> m	0.1		. <u>12.49</u>	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: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 4

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>4.4</u> m	0.1		2	POOL 50%
	3	0.1		3	RUN 50%
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.44</u> m	0.2		5	
	6 APART	0.3		6	<u>12.06</u> PPM
	7	0.3		7	
	8	0.3		8	%
	9	0.1		9	
	10	< 0.1		10	
TH	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>4.3</u> m	0.1		13	POOL 50%
	3	0.1		14	RUN 50%
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.43</u> m	0.2		16	
	6 APART	0.1		17	<u>12.18</u> PPM
	7	0.2		18	
	8	0.2		19	%
	9	0.1		20	
	10	< 0.1		21	
TI	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>6.5</u> m	0.1		24	POOL 40% RUN 40%
	3	0.1		25	RIFFLE 20%
	4 MEASUREMENTS	< 0.1		26	DISSOLVED OXYGEN:
	5 <u>0.65</u> m	< 0.1		.	
	6 APART	< 0.1		.	<u>12.43</u> PPM
	7	0.1		.	
	8	0.2		n	%
	9	0.1			
	10	0.1			

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

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

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

Signed: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 4

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>3.5</u> M	<0.1		2 RIFFLE 10%	
	3	<0.1		3 RUN 45% POOL 45%	
	4 MEASUREMENTS	0.2		4 DISSOLVED OXYGEN:	
	5 <u>0.35</u> M	0.1		5 <u>12.51</u> PPM	
	6 APART	0.1		6	
	7	0.1		7	%
	8	0.1		8	
	9	0.1		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	2 <u>4.0</u> M	<0.1		13 RIFFLE 100%	
	3	<0.1		14	
	4 MEASUREMENTS	<0.1		15 DISSOLVED OXYGEN:	
	5 <u>0.4</u> M	0.1		16	
	6 APART	0.1		17 <u>13.18</u> 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: [Signature] Date: 6/6/07

Organization: BWR CORP Position: ENV. SCI.

WBID# 327
 Site# 5

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

Date & Time: <u>6/6/07 14:30</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ HWY 169 (DOWNSTREAM FROM BRIDGE)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR 70°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAIN/FAIR/CL.</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.98092</u>	Y: <u>094.59082</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
<input checked="" type="checkbox"/> Global Positioning System (GPS)	<input type="checkbox"/> Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

20, 21

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-22,23</u>	<u>TRAN J-K</u>	<u>327;20,21</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: HWY 169

% CHANNEL FEATURE:

RIFFLE : _____

RUN : 60%

POOL : 40%

* Page Two – Data Sheet B for WBID # 327 :
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	<u>50</u> % Sand	<u>30</u> % Silt	<u>20</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE OBSERVED

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/06/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 5

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
2	<u>6.2</u> m	0.2		2	RUN 100%
3		0.3		3	
4	MEASUREMENTS	0.4		4	DISSOLVED OXYGEN:
5	<u>0.62</u> m	0.5		5	<u>11.18</u> PPM
6	APART	0.4		6	%
7		0.5		7	
8		0.2		8	
9		0.2		9	
10		< 0.1		10	

TB

				11	
1	WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
2	<u>8.0</u> m	0.2		13	RUN 100%
3		0.2		14	
4	MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
5	<u>0.80</u> m	0.2		16	
6	APART	0.2		17	<u>11.34</u> PPM
7		0.2		18	
8		0.1		19	%
9		< 0.1		20	
10		< 0.1		21	

TC

				22	CHANNEL FEATURE:
1	WETTED WIDTH	0.1		23	RUN
2	<u>9.5</u> m	0.2		24	
3		0.2		25	DISSOLVED OXYGEN:
4	MEASUREMENTS	0.2		26	
5	<u>0.95</u> m	0.2		.	<u>11.29</u> 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: [Signature] Date: 06/06/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 5

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	<0.1	1	CHANNEL FEATURE:
	2	<u>5.0</u> m	0.1	2	RUN 100%
	3		0.2	3	
	4	MEASUREMENTS	0.2	4	DISSOLVED OXYGEN:
	5	<u>0.5</u> m	0.1	5	<u>11.26</u> PPM
	6	APART	0.1	6	
	7		0.1	7	<u> </u> %
	8		0.1	8	
	9		0.1	9	
	10		<0.1	10	
TE	1	WETTED WIDTH	<0.1	12	CHANNEL FEATURE:
	2	<u>3.0</u> m	0.1	13	RUN 100%
	3		0.1	14	
	4	MEASUREMENTS	0.2	15	DISSOLVED OXYGEN:
	5	<u>0.30</u> m	0.2	16	<u>11.42</u> PPM
	6	APART	0.2	17	
	7		0.2	18	<u> </u> %
	8		0.1	19	
	9		0.1	20	
	10		<0.1	21	
TF	1	WETTED WIDTH	0.2	23	CHANNEL FEATURE:
	2	<u>10.0</u> m	0.7	24	RUN 100%
	3		0.7	25	
	4	MEASUREMENTS	0.6	26	DISSOLVED OXYGEN:
	5	<u>1.0</u> m	0.5	.	<u>11.62</u> PPM
	6	APART	0.3	.	
	7		0.2	.	<u> </u> %
	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: [Signature] Date: 06/06/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 5

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>7.0</u> m	<0.1		2	RUN 100%
	3	<0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.7</u> m	0.1		5	
	6 APART	0.1		6	<u>12.07</u> PPM
	7	0.1		7	
	8	0.2		8	%
	9	0.2		9	
	10	0.1		10	
TH	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>4.7</u> m	<0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.47</u> m	0.2		16	
	6 APART	0.2		17	<u>12.76</u> PPM
	7	0.1		18	
	8	0.1		19	%
	9	<0.1		20	
	10	<0.1		21	
TI	1 WETTED WIDTH	0.1		23	CHANNEL FEATURE:
	2 <u>9.0</u> m	0.2		24	POOL 100%
	3	0.3		25	
	4 MEASUREMENTS	0.3		26	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	0.3		.	
	6 APART	0.5		.	<u>12.83</u> PPM
	7	0.3		.	
	8	0.3		n	%
	9	0.2		.	
	10	0.1		.	

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

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

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

Signed: [Signature] Date: 06/06/07

Organization: BWR CORP. Position: ENVIRONMENTAL SCI.

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

WBID# 327 SITE# 5

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	0.3		1 CHANNEL	FEATURE :
	2 <u>5.5</u> M	0.2		2 POOL 100%	
	3	0.4		3	
	4 MEASUREMENTS	0.4		4 DISSOLVED OXYGEN:	
	5 <u>0.55</u> M	0.3		5 <u>12.64</u> PPM	
	6 APART	0.2		6	
	7	0.1		7	%
	8	0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	2 <u>2.5</u> M	0.2		13 POOL 100%	
	3	0.3		14	
	4 MEASUREMENTS	0.3		15 DISSOLVED OXYGEN:	
	5 <u>0.85</u> M	0.3		16	
	6 APART	0.2		17 <u>12.33</u> PPM	
	7	0.2		18	
	8	0.2		19	%
	9	0.2		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.

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Signed: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 6

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

Date & Time: <u>6/6/07 15:40</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CRABILL RD. (UPSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR - 75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAIN/FAIR/CLEAR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>39.9366</u>		Y: <u>094.59267</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP			

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-26,27,28,29</u>	<u>TRAN J-K</u>	<u>327-24,25</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments: AGRICULTURE

Indications of Human Use*: (attach photos)

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

Comments: CRABILL CR.

% CHANNEL FEATURE:

RIFFLE : _____

RUN : 60%

POOL : 40%

* Page Two – Data Sheet B for WBID # 327 :

Stream Morphology:

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

<u>0</u> % Cobble	<u>0</u> % Gravel	<u>60</u> % Sand	<u>30</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE OBSERVED

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/6/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 6

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>6.5 m</u>	<0.1		2	RUN 100%
3		<0.1		3	
4	MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
5	<u>0.65 m</u>	0.1		5	<u>12.93</u> PPM
6	APART	0.1		6	_____ %
7		<0.1		7	
8		<0.1		8	
9		0.2		9	
10		0.1		10	

TB

1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>5.5 m</u>	0.2		13	RUN 100%
3		0.2		14	
4	MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
5	<u>0.55 m</u>	0.2		16	
6	APART	0.1		17	<u>12.64</u> PPM
7		0.2		18	
8		0.1		19	_____ %
9		0.1		20	
10		0.1		21	

TC

1	WETTED WIDTH	<0.1		22	CHANNEL FEATURE:
2	<u>3.0 m</u>	0.1		23	RUN 100%
3		0.2		24	
4	MEASUREMENTS	0.2		25	DISSOLVED OXYGEN:
5	<u>0.30 m</u>	0.3		26	
6	APART	0.3		.	<u>12.80</u> 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: [Signature]

Date: 6/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 6

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1	WETTED WIDTH	<0.1	1	CHANNEL FEATURE:
	2	<u>4.5</u> m	0.1	2	RUN 100%
	3		0.3	3	
	4	MEASUREMENTS	0.3	4	DISSOLVED OXYGEN:
	5	<u>0.45</u> m	0.3	5	<u>12.56</u> PPM
	6	APART	0.3	6	
	7		0.2	7	_____ %
	8		0.2	8	
	9		0.1	9	
	10		<0.1	10	
TE	1	WETTED WIDTH	<0.1	12	CHANNEL FEATURE:
	2	<u>7.5</u> m	0.3	13	RUN 100%
	3		0.3	14	
	4	MEASUREMENTS	0.3	15	DISSOLVED OXYGEN:
	5	<u>0.75</u> m	0.3	16	<u>12.31</u> PPM
	6	APART	0.3	17	
	7		0.3	18	_____ %
	8		0.3	19	
	9		0.2	20	
	10		<0.1	21	
TF	1	WETTED WIDTH	<0.1	23	CHANNEL FEATURE:
	2	<u>9.0</u> m	0.2	24	POOL 100%
	3		0.3	25	
	4	MEASUREMENTS	0.2	26	DISSOLVED OXYGEN:
	5	<u>0.90</u> m	0.2	.	<u>12.44</u> PPM
	6	APART	0.2	.	
	7		0.3	.	_____ %
	8		0.3	n	
	9		0.3		
	10		<0.1		

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

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

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

Signed: [Signature] Date: 6/6/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 6

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>8.0</u> m	0.3		2	POOL 50%
	3	0.3		3	RUN 50%
	4 MEASUREMENTS	0.3		4	DISSOLVED OXYGEN:
	5 <u>0.80</u> m	0.2		5	
	6 APART	0.1		6	<u>12.78</u> PPM
	7	0.1		7	
	8	0.1		8	_____%
	9	0.1		9	
	10	0.1		10	
T _H	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>5.5</u> m	0.3		13	POOL 100%
	3	0.3		14	
	4 MEASUREMENTS	0.3		15	DISSOLVED OXYGEN:
	5 <u>0.55</u> m	0.3		16	
	6 APART	0.3		17	<u>12.40</u> PPM
	7	0.2		18	
	8	0.2		19	_____%
	9	0.1		20	
	10	0.1		21	
T _I	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.2		24	POOL 50%
	3	0.1		25	RUN 50%
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.7</u> m	0.1		.	
	6 APART	0.1		.	<u>12.14</u> PPM
	7	0.2		.	
	8	0.2		n	_____%
	9	0.3			
	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.

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: 4/6/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 6

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>4.2</u> m	0.2		2 POOL 30%	
	3	0.3		3 RUN 70%	
	4 MEASUREMENTS	0.3		4 DISSOLVED OXYGEN:	
	5 <u>0.42</u> m	0.3		5 <u>12.31</u>	PPM
	6 APART	0.4		6	
	7	0.4		7	%
	8	0.4		8	
	9	0.2		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	0.1		12 CHANNEL	FEATURE :
	2 <u>6.5</u> m	0.3		13 RUN 100%	
	3	0.3		14	
	4 MEASUREMENTS	0.4		15 DISSOLVED OXYGEN:	
	5 <u>0.65</u> m	0.4		16	
	6 APART	0.5		17 <u>11.8</u>	PPM
	7	0.5		18	
	8	0.5		19	%
	9	0.3		20	
	10	0.2		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: [Signature] Date: 6/6/07

Organization: BWR CORP. Position: ENV. Sci.

WBID# 327
 Site# 7

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

Date & Time: <u>6/7/07 0945</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CR 258 (SITE DOWNSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST WIND 75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: <u>39.92200</u>		Y: <u>094.59312</u>	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
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
<u>327-1,2¹</u>	<u>TRAN J-K</u>	<u>327,3-4</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments: AGRICULTURE - ROW CROP ON BOTH SIDES.

Indications of Human Use*: (attach photos)

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

Comments: CR 258

* Page Two – Data Sheet B for WBID # 327 :
Stream Morphology:

% CHANNEL FEATURE:
RIFFLE : 5
RUN : 60
POOL : 35

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

Select one of the following channel features:

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

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

Select one of the following channel features:

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

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

<u>5</u> % Cobble	<u>5</u> % Gravel	<u>40</u> % Sand	<u>40</u> % Silt	<u>10</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

SPARSE PERIPHYTON GROWTH WHERE ROCK SUBSTRATE WAS PRESENT.

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 7

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TA	1 WETTED WIDTH	0.1		1 CHANNEL	FEATURE :
	2 <u>9.5</u> m	0.1		2 RUN 100%	
	3	<0.1		3	
	4 MEASUREMENTS	<0.1		4 DISSOLVED OXYGEN :	
	5 <u>0.95</u> m	<0.1		5 <u>9.97</u> PPM	
	6 APART	0.1		6	%
	7	0.1		7	
	8	0.1		8	
	9	0.1		9	
	10	0.1		10	
TB	1 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	2 <u>9.5</u> m	0.2		13 RUN 100%	
	3	0.3		14	
	4 MEASUREMENTS	0.2		15 DISSOLVED OXYGEN :	
	5 <u>0.95</u> m	0.2		16	
	6 APART	0.2		17 <u>9.57</u> PPM	
	7	0.2		18	
	8	0.2		19	%
	9	0.2		20	
	10	<0.1		21	
TC	1 WETTED WIDTH	<0.1		22 CHANNEL	FEATURE :
	2 <u>8.5</u> m	0.2		23 RUN 100%	
	3	0.3		25 DISSOLVED OXYGEN :	
	4 MEASUREMENTS	0.4		26	
	5 <u>0.85</u> m	0.5		. <u>9.48</u> PPM	
	6 APART	0.5		.	
	7	0.4		.	%
	8	0.4		n	
	9	0.3			
	10	0.1			

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

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

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

Signed: [Signature] Date: 6/7/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 7

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>8.5</u> m	0.1		2	RUN 100%
	3	0.3		3	
	4 MEASUREMENTS	0.4		4	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	0.4		5	<u>9.79</u> PPM
	6 APART	0.4		6	
	7	0.4		7	%
	8	0.3		8	
	9	0.3		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	0.1		12	CHANNEL FEATURE:
	2 <u>5.0</u> m	0.4		13	POOL 100%
	3	0.5		14	
	4 MEASUREMENTS	0.5		15	DISSOLVED OXYGEN:
	5 <u>0.50</u> m	0.6		16	<u>9.48</u> PPM
	6 APART	0.5		17	
	7	0.4		18	%
	8	0.5		19	
	9	0.3		20	
	10	0.2		21	
TF	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.2		24	RUN 100%
	3	0.3		25	
	4 MEASUREMENTS	0.3		26	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	0.3		.	<u>9.72</u> PPM
	6 APART	0.3		.	
	7	0.2		.	%
	8	0.2		n	
	9	0.3			
	10	0.1			

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

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

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

Signed: [Signature] Date: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 7

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>7.1</u> m	0.1		2	POOL 30%
	3	0.2		3	RUN 70%
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.71</u> m	0.1		5	
	6 APART	<0.1		6	<u>9.75</u> PPM
	7	0.1		7	
	8	0.2		8	_____ %
	9	0.2		9	
	10	<0.1		10	
T _H	1 WETTED WIDTH	0.1		12	CHANNEL FEATURE:
	2 <u>5.0</u> m	0.2		13	POOL 100%
	3	0.3		14	
	4 MEASUREMENTS	0.4		15	DISSOLVED OXYGEN:
	5 <u>0.50</u> m	0.3		16	
	6 APART	0.3		17	<u>9.75</u> PPM
	7	0.4		18	
	8	0.2		19	_____ %
	9	0.1		20	
	10	<0.1		21	
T _I	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.5		24	POOL 100%
	3	0.7		25	
	4 MEASUREMENTS	1.0		26	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	1.0		.	
	6 APART	0.8		.	<u>9.66</u> PPM
	7	0.7		.	
	8	0.5		n	_____ %
	9	0.3			
	10	0.1			

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

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

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

Signed: [Signature] Date: 6/7/07

Organization: BWR CORP Position: ENV. SCI.

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

WBID # 327 SITE # 7

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE :
	<u>6.5</u> m	0.3		2 POOL	100%
		0.5		3	
	MEASUREMENTS	0.4		4 DISSOLVED OXYGEN:	
	<u>0.65</u> m	0.4		5 <u>9.97</u>	PPM
	APART	0.5		6	
		0.4		7	%
		0.4		8	
		0.2		9	
		0.1		10	
TK	WETTED WIDTH	< 0.1		12 CHANNEL	FEATURE :
	<u>3.4</u> m	< 0.1		13 RIFFLE	70%
		0.1		14 POOL	30%
	MEASUREMENTS	0.1		15 DISSOLVED OXYGEN:	
	<u>0.34</u> m	0.1		16	
	APART	0.2		17 <u>10.60</u>	PPM
		0.3		18	
		0.2		19	%
		0.1		20	
		< 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: [Signature]

Date: 6/7/07

Organization: BWR CORP.

Position: ENV. SCI.

WBID# 327
 Site# 8

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

Date & Time: <u>6/7/07 1100</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ FAIRMONT CR (SITE DOWNSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST, WINDY 75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.90744</u>	Y: <u>094.59411</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
<input checked="" type="checkbox"/> Global Positioning System (GPS)	<input type="checkbox"/> Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-5,6</u>	<u>TRAN B-A</u>	<u>327-7,8,9</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: CR FAIRMONT

% CHANNEL FEATURE:
 RIFFLE: 15
 RUN: 65
 POOL: 20

* Page Two – Data Sheet B for WBID # 327 :
 Stream Morphology:

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

Select one of the following channel features:

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

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

Select one of the following channel features:

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

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

<u>35</u> % Cobble	<u>20</u> % Gravel	<u>15</u> % Sand	<u>20</u> % Silt	<u>5</u> % Mud/Clay	<u>5</u> % Bedrock
--------------------	--------------------	------------------	------------------	---------------------	--------------------

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

SPARSE PERIPHERY GROWTH WHERE COBBLE SUBSTRATE WAS PRESENT.

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 8

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>3.7 m</u>	0.2		2	RUN 100%
3		0.1		3	
4	MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
5	<u>0.37 m</u>	0.2		5	<u>9.48</u> PPM
6	APART	0.2		6	<u> </u> %
7		0.2		7	
8		0.1		8	
9		0.1		9	
10		<0.1		10	

TB

				11	
1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>2.7 m</u>	<0.1		13	RUN 100%
3		<0.1		14	
4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
5	<u>0.27 m</u>	0.1		16	
6	APART	0.1		17	<u>9.55</u> PPM
7		0.1		18	
8		0.1		19	<u> </u> %
9		0.1		20	
10		<0.1		21	

TC

				22	CHANNEL FEATURE:
1	WETTED WIDTH	<0.1		23	RUN 100%
2	<u>4.0 m</u>	0.1		24	
3		0.1		25	DISSOLVED OXYGEN:
4	MEASUREMENTS	0.1		26	
5	<u>0.40 m</u>	0.2		.	<u>9.41</u> PPM
6	APART	0.2		.	<u> </u> %
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: [Signature] Date: 6/7/07

Organization: BWP. CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 8

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>2.3</u> m	<0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.23</u> m	0.1		5	<u>9.58</u> PPM
	6 APART	0.1		6	
	7	0.2		7	_____ %
	8	0.1		8	
	9	0.1		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	0.1		12	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.3		13	POOL 30%
	3	0.3		14	RUN 70%
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	0.2		16	<u>9.30</u> PPM
	6 APART	0.2		17	
	7	0.2		18	_____ %
	8	0.2		19	
	9	0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>8.0</u> m	0.2		24	POOL 100%
	3	0.3		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.80</u> m	0.2		.	<u>9.13</u> PPM
	6 APART	0.3		.	
	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.

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Signed: [Signature] Date: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 8

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>4.5</u> m	0.1		2	RUN 100%
	3	0.2		3	
	4 MEASUREMENTS	0.3		4	DISSOLVED OXYGEN:
	5 <u>0.45</u> m	0.3		5	
	6 APART	0.3		6	<u>9.50</u> PPM
	7	0.3		7	
	8	0.2 0.2		8	%
	9	0.1		9	
	10	< 0.1		10	
TH	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>4.5</u> m	< 0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	< 0.1		15	DISSOLVED OXYGEN:
	5 <u>0.45</u> m	0.1		16	
	6 APART	0.1		17	<u>9.44</u> PPM
	7	0.1		18	
	8	0.1		19	%
	9	0.1		20	
	10	< 0.1		21	
TI	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>5.0</u> m	0.3		24	RUN 100%
	3	0.3		25	
	4 MEASUREMENTS	0.4		26	DISSOLVED OXYGEN:
	5 <u>0.5</u> m	0.2		.	
	6 APART	0.4		.	<u>7.31</u> PPM
	7	0.3		.	
	8	0.3		n	%
	9	0.2			
	10	0.1			

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

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

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

Signed: [Signature] Date: 6/07/07

Organization: BWP CORP Position: ENV. SCI.

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

WBID# 327 SITE# 8

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>5.0</u> m	0.1		2 RIFFLE	20%
	3	0.2		3 RUN	
	4 MEASUREMENTS	0.2		4 DISSOLVED OXYGEN :	
	5 <u>0.5</u> m	0.3		5 <u>9.34</u>	PPM
	6 APART	0.2		6	
	7	0.2		7	%
	8	<0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TK	1 WETTED WIDTH	0.1		12 CHANNEL	FEATURE :
	2 <u>10.0</u> m	<0.1		13 RUN	50%
	3	0.1		14 RIFFLE	50%
	4 MEASUREMENTS	0.2		15 DISSOLVED OXYGEN :	
	5 <u>1.0</u> m	0.2		16	
	6 APART	0.1		17 <u>9.76</u>	PPM
	7	0.2		18	
	8	0.2		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: [Signature] Date: 6/7/07

Organization: BWR CORP Position: ENV. SCI.

WBID# 327
 Site# 9

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

Date & Time: <u>6/7/07 1200</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ HWY V</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST/WINDY -75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.89230</u>	Y: <u>094.59914</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE:	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-12,13</u>	<u>TRAN S-K</u>	<u>327-10,11</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: HWY V ; AGRICULTURE, ROW CROP.

* Page Two – Data Sheet B for WBID # 327 :
Stream Morphology:

% CHANNEL FEATURE:
RIFFLE : 2
RUN : 98
POOL :

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	<u>85</u> % Sand	<u>15</u> % Silt	% Mud/Clay	% Bedrock
----------	----------	------------------	------------------	------------	-----------

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

EPISOMMIC ALGAE PRESENT ON SAND IN SHALLOW AREAS

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/07/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 9

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>9.0 m</u>	0.3		2	RUN 100%
3		0.3		3	
4	MEASUREMENTS	0.3		4	DISSOLVED OXYGEN:
5	<u>0.90 m</u>	0.3		5	<u>12.52</u> PPM
6	APART	0.3		6	_____ %
7		0.4		7	
8		0.4		8	
9		0.2		9	
10		<0.1		10	

TB

1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>6.5 m</u>	<0.1		13	RIFFLE 5%
3		<0.1		14	RUN 95%
4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
5	<u>0.65 m</u>	0.1		16	
6	APART	0.1		17	<u>12.52</u> PPM
7		0.1		18	
8		0.1		19	_____ %
9		0.1		20	
10		<0.1		21	

TC

1	WETTED WIDTH	<0.1		22	CHANNEL FEATURE:
2	<u>4.5 m</u>	<0.1		23	RUN 100%
3		<0.1		24	
4	MEASUREMENTS	0.1		25	DISSOLVED OXYGEN:
5	<u>0.45 m</u>	0.1		26	
6	APART	0.1		.	<u>12.50</u> 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: [Signature] Date: 6/7/07

Organization: BWR COPP Position: ENV. SCI.

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

WBID# 327 SITE# 9

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>7.4</u> m	<0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.74</u> m	0.1		5	<u>12.17</u> PPM
	6 APART	0.1		6	
	7	0.1		7	%
	8	0.1		8	
	9	0.1		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>9.5</u> m	0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.95</u> m	0.1		16	<u>11.90</u> PPM
	6 APART	0.1		17	
	7	0.1		18	%
	8	0.1		19	
	9	0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>10.0</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	0.2		26	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	0.1		.	<u>12.28</u> PPM
	6 APART	0.1		.	
	7	0.1		.	%
	8	0.1		n	
	9	0.2			
	10	<0.1			

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

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

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

Signed: [Signature] Date: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 9

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>8.5</u> m	0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	0.2		5	
	6 APART	0.2		6	<u>12.15</u> PPM
	7	0.1		7	
	8	0.1		8	
	9	<0.1		9	
	10	<0.1		10	
T _H	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>6.0</u> m	0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.60</u> m	0.1		16	
	6 APART	0.1		17	<u>12.30</u> PPM
	7	0.2		18	
	8	0.1		19	
	9	0.1		20	
	10	<0.1		21	
T _I	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>0.8</u> m	0.1		24	RUN 100%
	3	0.2		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.68</u> m	0.1			
	6 APART	0.1			<u>12.06</u> 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: [Signature] Date: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 9

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE :
2	<u>6.0</u> m	0.2		2 RUN 100%	
3		0.2		3	
4	MEASUREMENTS	0.2		4 DISSOLVED OXYGEN:	
5	<u>0.60</u> m	0.3		5 <u>12.20</u> PPM	
6	APART	0.2		6	
7		0.2		7	%
8		0.1		8	
9		< 0.1		9	
10		< 0.1		10	
				11	
TK 1	WETTED WIDTH	< 0.1		12 CHANNEL	FEATURE :
2	<u>10.0</u> m	0.3		13 RUN 100%	
3		0.2		14	
4	MEASUREMENTS	0.1		15 DISSOLVED OXYGEN:	
5	<u>1.0</u> m	0.2		16	
6	APART	0.3		17 <u>11.70</u> PPM	
7		0.4		18	
8		0.3		19	%
9		0.4		20	
10		0.2		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: [Signature] Date: 6/7/07

Organization: BWR CORP Position: ENV. SCI.

WBID# 327
 Site# 10

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

Date & Time: <u>06/07/07 1300</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CR 269 (UPSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST/WINDY/RAIN 75%</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.86338</u>	Y: <u>094.59768</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327, 19-20</u>	<u>TRAN J-K</u>	<u>327, 14, 15, 16, 17, 18 (DEL 14-16)</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: CR 269

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 100

POOL: _____

* Page Two – Data Sheet B for WBID # 327 :
Stream Morphology:

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

<u>5</u> % Cobble	<u>5</u> % Gravel	<u>90</u> % Sand	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

SPARSE AMOUNT OF PERIPHYTON ON HARDER SUBSTRATES.

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/07/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 10

TA

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE:
2 <u>9.0 m</u>	0.2		2 RUN 100%	
3	0.2		3	
4 MEASUREMENTS	0.2		4 DISSOLVED	OXYGEN:
5 <u>0.90 m</u>	0.2		5 <u>11.70</u>	PPM
6 APART	0.1		6	%
7	0.2		7	
8	0.2		8	
9	0.2		9	
10	< 0.1		10	

TB

1 WETTED WIDTH	< 0.1		12 CHANNEL	FEATURE:
2 <u>8.5 m</u>	0.1		13 RUN 100%	
3	0.1		14	
4 MEASUREMENTS	0.1		15 DISSOLVED	OXYGEN:
5 <u>0.85 m</u>	0.1		16	
6 APART	0.1		17 <u>11.80</u>	PPM
7	0.2		18	
8	0.2		19	%
9	0.1		20	
10	0.1		21	

TC

1 WETTED WIDTH	0.1		22 CHANNEL	FEATURE:
2 <u>8.5 m</u>	0.1		23 RUN 100%	
3	0.1		24	
4 MEASUREMENTS	0.1		25 DISSOLVED	OXYGEN:
5 <u>0.85 m</u>	0.1		26	
6 APART	0.1		27	<u>11.74</u> PPM
7	0.1		28	%
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: [Signature] Date: 06/07/07

Organization: BWR CORP. Position: ENV. SCI.

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

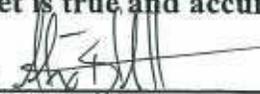
WBID# 327 SITE# 10

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>9.0</u> m	0.1		2	RUN 100%
	3	0.2		3	
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	0.2		5	<u>11.77</u> PPM
	6 APART	0.2		6	
	7	0.1		7	%
	8	0.1		8	
	9	0.1		9	
	10	0.1		10	
TE	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>8.3</u> m	< 0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.83</u> m	0.2		16	<u>11.98</u> PPM
	6 APART	0.2		17	
	7	0.3		18	%
	8	0.1		19	
	9	0.1		20	
	10	< 0.1		21	
TF	1 WETTED WIDTH	0.1		23	CHANNEL FEATURE:
	2 <u>8.5</u> m	< 0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	0.2		.	<u>11.47</u> PPM
	6 APART	0.2		.	
	7	0.1		.	%
	8	0.1		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: 06/07/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327

SITE # 10

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>8.5</u> m	0.4		2	RUN 100%
	3	0.6		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	0.1		5	
	6 APART	0.1		6	<u>11.51</u> PPM
	7	0.2		7	
	8	0.2		8	_____ %
	9	0.1		9	
	10	<0.1		10	
T _H	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>4.5</u> m	<0.1		13	RUN 100%
	3	0.2		14	
	4 MEASUREMENTS	0.3		15	DISSOLVED OXYGEN:
	5 <u>0.45</u> m	0.3		16	
	6 APART	0.4		17	<u>11.70</u> PPM
	7	0.4		18	
	8	0.1		19	_____ %
	9	0.1		20	
	10	<0.1		21	
T _I	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>3.5</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	<0.1		26	DISSOLVED OXYGEN:
	5 <u>0.35</u> m	0.3		.	
	6 APART	0.3		.	<u>11.82</u> 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: [Signature]

Date: 02/07/07

Organization: BWR CORP

Position: ENV. SCI.

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

WBID# 327 SITE# 10

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	0.1		1 CHANNEL	FEATURE :
2	<u>6.0</u> m	0.2		2 PON 100%	
3		0.3		3	
4	MEASUREMENTS	0.3		4 DISSOLVED OXYGEN:	
5	<u>0.60</u> m	0.3		5 <u>11.63</u> PPM	
6	APART	0.4		6	
7		0.4		7	%
8		0.3		8	
9		0.2		9	
10		0.1		10	
				11	
TK 1	WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
2	<u>6.0</u> m	<0.1		13 PON 100%	
3		0.2		14	
4	MEASUREMENTS	0.3		15 DISSOLVED OXYGEN:	
5	<u>0.60</u> m	0.4		16	
6	APART	0.4		17 <u>11.62</u> PPM	
7		0.5		18	
8		0.4		19	%
9		0.3		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: [Signature] Date: 06/07/07

Organization: BWP CORP Position: ENV. SCI.

WBID# 327
 Site# 11

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

Date & Time: <u>6/7/07 1430</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CR 271 (KETCHUM RD.)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST / RAIN IN AREA</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.84929</u>	Y: <u>094.59317</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327, 24, 25</u>	<u>TRAN J-K</u>	<u>327-21, 22, 23</u>	<u>TRAN S-A</u>	<u>SITE #11 #10' ON</u>	<u>PHOTO'S READ SITE BOARD. CHANGE IN OFFICE.</u>

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: CR271; ROW CROP AG.

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 20

POOL: 80

* Page Two – Data Sheet B for WBID # 327 :
Stream Morphology:

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

If so, is there an obvious current? Yes No

Select one of the following channel features:

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

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

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

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

NO ALGAL GROWTH OBSERVED; SPARSE AMOUNTS OF
ARROWHEAD PRESENT ON BANKS

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/07/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 11

TA

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 WETTED WIDTH	< 0.1		1 CHANNEL	FEATURE:
2 10.0 m	0.3		2 POOL 100%	
3	0.4		3	
4 MEASUREMENTS	0.4		4 DISSOLVED OXYGEN:	
5 1.0 m	0.4		5 12.05	PPM
6 APART	0.5		6	%
7	0.6		7	
8	0.6		8	
9	0.4		9	
10	< 0.1		10	

TB

1 WETTED WIDTH	< 0.1		12 CHANNEL	FEATURE:
2 10.0 m	0.3		13 POOL 100%	
3	0.3		14	
4 MEASUREMENTS	0.5		15 DISSOLVED OXYGEN:	
5 1.0 m	0.5		16	
6 APART	0.6		17 11.08	PPM
7	0.5		18	
8	0.4		19	%
9	0.3		20	
10	< 0.1		21	

TC

1 WETTED WIDTH	0.5		22 CHANNEL	FEATURE:
2 10.5 m	> 1.0		23 POOL 100%	
3	0.7		24	
4 MEASUREMENTS	0.4		25 DISSOLVED OXYGEN:	
5 1.5 m	0.4		26	
6 APART	0.5		10.80	PPM
7	0.7		7	%
8	0.7		n	
9	0.4			
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: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 11

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	0.6		1	CHANNEL FEATURE:
	2 <u>9.5</u> m	0.7		2	POOL 100%
	3	0.7		3	
	4 MEASUREMENTS	0.8		4	DISSOLVED OXYGEN:
	5 <u>0.95</u> m	1.0		5	<u>11.12</u> PPM
	6 APART	0.9		6	
	7	0.9		7	%
	8	>1.0		8	
	9	>1.0		9	
	10	0.7		10	
TE	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>10.0</u> m	0.4		13	POOL 100%
	3	0.4		14	
	4 MEASUREMENTS	0.3		15	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	0.3		16	<u>12.11</u> PPM
	6 APART	0.2		17	
	7	0.2		18	%
	8	0.4		19	
	9	0.5		20	
	10	0.1		21	
TF	1 WETTED WIDTH	0.2		23	CHANNEL FEATURE:
	2 <u>9.8</u> m	0.3		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.98</u> m	<0.1		.	<u>10.94</u> PPM
	6 APART	0.1		.	
	7	0.2		.	%
	8	0.3		n	
	9	0.2			
	10	<0.1			

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Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 11

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	0.1		1	CHANNEL FEATURE:
	2 <u>10.0</u> m	0.2		2	POOL 100%
	3	0.4		3	
	4 MEASUREMENTS	0.4		4	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	0.3		5	
	6 APART	0.4		6	<u>10.79</u> PPM
	7	0.3		7	
	8	0.3		8	%
	9	0.2		9	
	10	<0.1		10	
TH	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>8.0</u> m	0.3		13	POOL 100%
	3	0.3		14	
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.80</u> m	0.2		16	
	6 APART	0.2		17	<u>10.83</u> PPM
	7	0.2		18	
	8	0.2		19	%
	9	0.1		20	
	10	<0.1		21	
TI	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>7.5</u> m	0.1		24	POOL 100%
	3	0.2		25	
	4 MEASUREMENTS	0.2		26	DISSOLVED OXYGEN:
	5 <u>0.75</u> m	0.4		.	
	6 APART	0.4		.	<u>10.71</u> PPM
	7	0.5		.	
	8	0.5		n	%
	9	0.5			
	10	0.1			

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Signed: [Signature] Date: 06/07/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 11

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	<0.		1 CHANNEL	FEATURE :
2	<u>9.5</u> m	0.1		2	RUN 100%
3		0.2		3	
4	MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
5	<u>0.95</u> m	0.2		5	<u>10.76</u> PPM
6	APART	0.3		6	
7		0.3		7	_____ %
8		0.3		8	
9		0.2		9	
10		0.1		10	
				11	
TK 1	WETTED WIDTH	0.7		12 CHANNEL	FEATURE :
2	<u>10.0</u> m	0.4		13	POOL 100%
3		0.8		14	
4	MEASUREMENTS	0.9		15	DISSOLVED OXYGEN:
5	<u>1.0</u> m	0.7		16	
6	APART	0.3		17	<u>10.70</u> PPM
7		0.2		18	
8		0.2		19	_____ %
9		0.2		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.

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Signed: [Signature] Date: 06/07/07

Organization: BWP CORP. Position: ENV. SCI.

WBID# 327
 Site# 12

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

Date & Time: <u>6/07/07 1545</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ HWY P (UPSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>OVERCAST ~ 80°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>Fair</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.81263</u>	Y: <u>094.60690</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
<input checked="" type="checkbox"/> Global Positioning System (GPS)	<input type="checkbox"/> 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	
<input checked="" type="checkbox"/> GPS Data Quality	<input type="checkbox"/> Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-26, 27</u>		<u>327-28, 29</u>			

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: BLVD HWY P ; ROW CROP. AG.

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 100

POOL: _____

* Page Two – Data Sheet B for WBID # 327 :
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	80 % Sand	15 % Silt	% Mud/Clay	% Bedrock
----------	------------	-----------	-----------	------------	-----------

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

NONE OBSERVED

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/07/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 12

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>8.3</u> m	0.1		2	RUN 100%
3		<0.1		3	
4	MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
5	<u>0.83</u> m	0.1		5	<u>9.80</u> PPM
6	APART	0.1		6	%
7		<0.1		7	
8		0.2		8	
9		0.2		9	
10		0.2		10	

TB

1	WETTED WIDTH	0.1		12	CHANNEL FEATURE:
2	<u>11</u> m	0.3		13	RUN 100%
3		0.2		14	
4	MEASUREMENTS	<0.1		15	DISSOLVED OXYGEN:
5	<u>11.0</u> m	<0.1		16	
6	APART	<0.1		17	<u>9.46</u> PPM
7		<0.1		18	
8		<0.1		19	%
9		0.1		20	
10		<0.1		21	

TC

1	WETTED WIDTH	<0.1		22	CHANNEL FEATURE:
2	<u>6.0</u> m	0.3		23	RUN 100%
3		0.2		24	
4	MEASUREMENTS	0.1		25	DISSOLVED OXYGEN:
5	<u>0.60</u> m	0.1		.	<u>9.42</u> 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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Signed: [Signature]

Date: 06/07/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 12

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	0.1		5	<u>9.31</u> PPM
	6 APART	0.2		6	
	7	0.1		7	%
	8	0.1		8	
	9	0.1		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>6.0</u> m	0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.60</u> m	0.1		16	<u>9.41</u> PPM
	6 APART	0.1		17	
	7	0.1		18	%
	8	0.1		19	
	9	0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	0.1		23	CHANNEL FEATURE:
	2 <u>6.0</u> m	0.1		24	RUN 100%
	3	0.2		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.60</u> m	0.1		.	<u>9.40</u> PPM
	6 APART	0.1		.	
	7	0.1		.	%
	8	0.1		n	
	9	0.1			
	10	<0.1			

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Organization: BWR CORP Position: ENV. SCI.

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

WBID# 327 SITE# 12

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>6.5</u> m	0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.65</u> m	<0.1		5	
	6 APART	<0.1		6	<u>9.45</u> PPM
	7	0.2		7	
	8	0.1		8	
	9	<0.1		9	%
	10	<0.1		10	
T _H	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>6.0</u> m	0.1		13	RUN 100%
	3	0.2		14	
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.60</u> m	0.1		16	
	6 APART	0.1		17	<u>9.39</u> PPM
	7	0.1		18	
	8	0.1		19	%
	9	0.1		20	
	10	<0.1		21	
T _I	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>7.5</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	<0.1		26	DISSOLVED OXYGEN:
	5 <u>0.75</u> m	0.1		.	
	6 APART	<0.1		.	<u>9.30</u> PPM
	7	0.1		.	
	8	0.1		n	%
	9	0.2			
	10	0.1			

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Signed: [Signature] Date: 6/7/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 12

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>9.0</u> m	0.1		2 RUN	
	3	<0.1		3	
	4 MEASUREMENTS	<0.1		4 DISSOLVED OXYGEN:	
	5 <u>0.9</u> m	<0.1		5 <u>9.28</u>	PPM
	6 APART	<0.1		6	
	7	0.1		7	%
	8	0.2		8	
	9	0.1		9	
	10	<0.1		10	
TK	11			11	
	12 WETTED WIDTH	ADU <0.1		12 CHANNEL	FEATURE :
	13 WETS m	DU <0.1		13 RUN 100%	
	14 <u>8.5</u>	ADU 0.1		14	
	15 MEASUREMENTS	DU 0.1		15 DISSOLVED OXYGEN:	
	16 0.88 m	DU 0.1		16	
	17 APART	DU 0.1		17 9.42	PPM
	18 <u>0.85</u>	ADU 0.1		18 <u>9.42</u>	%
	19	0.2 0.1		19	
	20	0.2 0.2		20	
21	0.2 0.1		21		
			22		
			23		
			24		
			25		
			26		
			.		
			.		
			.		
			n		

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Signed: [Signature] Date: 6/7/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327

Site# 13

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

Date & Time: <u>6/8/07 0900</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ CR HURLINGEN</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	Facility Name: <u>NON-POINT</u>
Current Weather Conditions: <u>CLEAR, 60°F</u>	Permit Number: <u>N/A</u>
Weather Conditions for Past 10 days: <u>FAIR/RAIN/CL.</u>	
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.7418</u>	Y: <u>094.61221</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327, 3-4</u>	<u>TRAN J-K</u>	<u>327-1,2</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: CR HURLINGEN

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 100

POOL: _____

* Page Two – Data Sheet B for WBID # 327 :
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	<u>10</u> % Gravel	<u>85</u> % Sand	<u>5</u> % Silt	% Mud/Clay	% Bedrock
----------	--------------------	------------------	-----------------	------------	-----------

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

NONE OBSERVED

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 06/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 13

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	0.1		1	CHANNEL FEATURE:
2	<u>7.9</u> m	<0.1		2	RUN 100%
3		<0.1		3	
4	MEASUREMENTS	<0.1		4	DISSOLVED OXYGEN:
5	<u>0.79</u> m	0.1		5	<u>11.26</u> PPM
6	APART	0.1		6	%
7		0.1		7	
8		0.1		8	
9		0.1		9	
10		<0.1		10	

TB

				11	
1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>6.0</u> m	0.1		13	RUN 100%
3		0.1		14	
4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
5	<u>0.60</u> m	0.1		16	
6	APART	0.1		17	<u>9.94</u> PPM
7		0.1		18	
8		<0.1		19	%
9		<0.1		20	
10		<0.1		21	

TC

				22	CHANNEL FEATURE:
1	WETTED WIDTH	<0.1		23	RUN 100%
2	<u>7.0</u> m	0.1		24	
3		0.1		25	DISSOLVED OXYGEN:
4	MEASUREMENTS	0.1		26	
5	<u>0.7</u> m	0.2		.	<u>9.90</u> 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: [Signature]

Date: 6/08/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 13

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>3.8</u> m	0.1		2	RUN 100%
	3	0.2		3	
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.38</u> m	0.2		5	<u>9.78</u> PPM
	6 APART	0.2		6	
	7	0.1		7	
	8	0.1		8	
	9	0.1		9	
	10	< 0.1		10	
TE	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>4.8</u> m	< 0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.48</u> m	0.1		16	<u>9.65</u> PPM
	6 APART	0.1		17	
	7	0.1		18	
	8	0.1		19	
	9	< 0.1		20	
	10	< 0.1		21	
TF	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	< 0.1		26	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	< 0.1		.	<u>9.71</u> PPM
	6 APART	0.1		.	
	7	0.1		.	
	8	0.1		n	
	9	0.2			
	10	< 0.1			

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

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

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

Signed: [Signature] Date: 06/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 13

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>7.0</u> m	< 0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	< 0.1		5	
	6 APART	< 0.1		6	<u>9.70</u> PPM
	7	0.1		7	
	8	0.1		8	%
	9	0.2		9	
	10	< 0.1		10	
T _H	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>4.5</u> m	< 0.1		13	RUN 100%
	3	0.1		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u>0.45</u> m	0.2		16	
	6 APART	0.2		17	<u>9.58</u> PPM
	7	0.2		18	
	8	0.1		19	%
	9	0.1		20	
	10	< 0.1		21	
T _I	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>6.5</u> m	< 0.1		24	RUN 100%
	3	< 0.1		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.65</u> m	0.1		.	
	6 APART	0.1		.	<u>9.68</u> 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: [Signature]

Date: 6/08/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 13

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
	2 <u>5.5</u> m	0.1		2 RUN 100%	
	3	0.1		3	
	4 MEASUREMENTS	0.1		4 DISSOLVED OXYGEN :	
	5 <u>0.55</u> m	0.1		5 <u>9.84</u> PPM	
	6 APART	0.1		6	
	7	0.1		7	%
	8	0.1		8	
	9	<0.1		9	
	10	<0.1		10	
TK	11			11	
	12 WETTED WIDTH	<0.1		12 CHANNEL	FEATURE :
	13 <u>4.2</u> m	<0.1		13 RUN 100%	
	14	<0.1		14	
	15 MEASUREMENTS	0.1		15 DISSOLVED OXYGEN :	
	16 <u>0.42</u> m	0.1		16	
	17 APART	0.2		17 <u>9.56</u> PPM	
	18	0.2		18	
	19	0.1		19	%
	20	0.1		20	
21	<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: [Signature]

Date: 06/08/07

Organization: BWR CORP.

Position: ENV. SCI.

WBID# 327
 Site# 14

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

Date & Time: <u>6/8/07 1000</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ HWY 6</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 70°</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR/RAIN/CL.</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.76912</u>	Y: <u>094.63595</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327; 7,8</u>	<u>TRAN J-K</u>	<u>327; 5,6</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: HWY 6

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 75

POOL: 25

* Page Two – Data Sheet B for WBID # 327 :
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	<u>0</u> % Gravel	<u>80</u> % Sand	<u>10</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE OBSERVED

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 14

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	0.1		1	CHANNEL FEATURE:
2	<u>12.0 m</u>	0.5		2	RUN 100%
3		0.9		3	
4	MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
5	<u>1.20 m</u>	>1.0		5	<u>8.15</u> PPM
6	APART	>1.0		6	_____ %
7		>1.0		7	
8		0.9		8	
9		0.7		9	
10		0.3		10	

TB

1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>11.0 m</u>	0.5		13	POOL 100%
3		0.3		14	
4	MEASUREMENTS	0.3		15	DISSOLVED OXYGEN:
5	<u>1.10 m</u>	0.5		16	
6	APART	0.6		17	<u>7.75</u> PPM
7		0.5		18	
8		0.9		19	_____ %
9		>1.0		20	
10		>1.0		21	

TC

1	WETTED WIDTH	<0.1		22	CHANNEL FEATURE:
2	<u>8.5 m</u>	0.1		23	RUN 100%
3		0.2		24	
4	MEASUREMENTS	0.3		25	DISSOLVED OXYGEN:
5	<u>0.85 m</u>	0.3		.	<u>7.82</u> PPM
6	APART	0.4		.	
7		0.3		.	_____ %
8		0.3		n	
9		0.2			
10		0.1			

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

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

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

Signed: [Signature]

Date: 6/08/07

Organization: ENR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 14

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
	2 <u>9.0</u> m	0.3		2	RUN 100%
	3	0.3		3	
	4 MEASUREMENTS	0.4		4	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	0.4		5	<u>7.67</u> PPM
	6 APART	0.4		6	
	7	0.4		7	%
	8	0.5		8	
	9	0.4		9	
	10	0.1		10	
TE	1 WETTED WIDTH	< 0.1		12	CHANNEL FEATURE:
	2 <u>8.6</u> m	0.3		13	RUN 100%
	3	0.2		14	
	4 MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
	5 <u>0.86</u> m	0.2		16	<u>7.68</u> PPM
	6 APART	0.1		17	
	7	0.1		18	%
	8	0.1		19	
	9	0.3		20	
	10	0.1		21	
TF	1 WETTED WIDTH	< 0.1		23	CHANNEL FEATURE:
	2 <u>7.0</u> m	0.4		24	RUN 100%
	3	0.7		25	
	4 MEASUREMENTS	0.7		26	DISSOLVED OXYGEN:
	5 <u>0.70</u> m	0.6		.	<u>7.64</u> PPM
	6 APART	0.6		.	
	7	0.4		.	%
	8	0.3		n	
	9	0.2			
	10	< 0.1			

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

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

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

Signed: [Signature] Date: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 14

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	0.4		1	CHANNEL FEATURE:
	2 <u>8.5</u> m	>1.0		2	POOL 100%
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	>1.0		5	
	6 APART	>1.0		6	<u>7.55</u> PPM
	7	>1.0		7	
	8	0.9		8	%
	9	0.8		9	
	10	0.3		10	
TH	1 WETTED WIDTH	0.5		12	CHANNEL FEATURE:
	2 <u>9.0</u> m	0.5		13	POOL 100%
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	>1.0		16	
	6 APART	>1.0		17	<u>10.03</u> PPM
	7	>1.0		18	
	8	>1.0		19	%
	9	0.8		20	
	10	0.8		21	
TI	1 WETTED WIDTH	0.1		23	CHANNEL FEATURE:
	2 <u>5.5</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>0.55</u> m	0.1		.	
	6 APART	<0.1		.	<u>10.21</u> 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: [Signature]

Date: 6/08/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 14

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ 1	WETTED WIDTH	<0.1		1 CHANNEL	FEATURE :
2	<u>7.0</u> M	0.1		2	RUN 100%
3		0.1		3	
4	MEASUREMENTS	0.1		4	DISSOLVED OXYGEN :
5	<u>0.70</u> M	0.1		5	<u>10.26</u> 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	<u>6.7</u> M	<0.1		13	RUN 100%
3		0.1		14	
4	MEASUREMENTS	0.1		15	DISSOLVED OXYGEN :
5	<u>0.67</u> M	0.1		16	
6	APART	0.1		17	<u>10.36</u> 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: [Signature] Date: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 15

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

Date & Time: <u>02/08/07 1145</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING AT KEMMER RD. (SITE UPSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 75%</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR/RAIN/CL.</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.72608</u>	Y: <u>094.67187</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-11,12</u>	<u>TRAN J-K</u>	<u>327-9,10</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Indications of Human Use*: (attach photos)

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

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 70

POOL: 30

* Page Two – Data Sheet B for WBID # 327 :
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	<u>70</u> % Sand	<u>30</u> % Silt	% Mud/Clay	% Bedrock
----------	----------	------------------	------------------	------------	-----------

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

AMERICAN WATER WILLOW (~~AMERICAN WILLOW~~) ON BOTH BANKS

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 15

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
2	<u>7.5 m</u>	0.4		2	<u>RUN 100%</u>
3		0.7		3	
4	MEASUREMENTS	0.7		4	DISSOLVED OXYGEN:
5	<u>0.75 m</u>	0.6		5	<u>9.43</u> PPM
6	APART	0.4		6	<u> </u> %
7		0.4		7	
8		0.1		8	
9		0.1		9	
10		<0.1		10	

TB

1	WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
2	<u>9.0 m</u>	<0.1		13	<u>RUN 100%</u>
3		0.1		14	
4	MEASUREMENTS	0.2		15	DISSOLVED OXYGEN:
5	<u>0.90 m</u>	0.1		16	
6	APART	0.2		17	<u>9.14</u> PPM
7		<0.1		18	
8		0.4		19	<u> </u> %
9		0.4		20	
10		0.3		21	

TC

1	WETTED WIDTH	<0.1		22	CHANNEL FEATURE:
2	<u>8.5 m</u>	0.2		23	<u>RUN 100%</u>
3		0.3		24	
4	MEASUREMENTS	0.2		25	DISSOLVED OXYGEN:
5	<u>0.85 m</u>	0.2		26	
6	APART	0.2		.	<u>8.98</u> PPM
7		0.2		.	<u> </u> %
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: [Signature]

Date: 6/8/07

Organization: RWR CORP.

Position: ENV. SCI.

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

WBID# 327 SITE# 15

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>10.0</u> m	0.2		2	RUN 100%
	3	0.2		3	
	4 MEASUREMENTS	0.1		4	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	0.1		5	<u>9.26</u> PPM
	6 APART	0.2		6	
	7	0.2		7	%
	8	0.2		8	
	9	0.2		9	
	10	<0.1		10	
TE	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>9.6</u> m	0.2		13	RUN 100%
	3	0.2		14	
	4 MEASUREMENTS	0.1		15	DISSOLVED OXYGEN:
	5 <u> </u> m	0.2		16	<u>8.93</u> PPM
	6 APART	0.1		17	
	7	0.1		18	%
	8	0.2		19	
	9	0.1		20	
	10	<0.1		21	
TF	1 WETTED WIDTH	<0.1		23	CHANNEL FEATURE:
	2 <u>10.5</u> m	0.1		24	RUN 100%
	3	0.1		25	
	4 MEASUREMENTS	0.1		26	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	0.1		.	<u>9.07</u> PPM
	6 APART	0.1		.	
	7	0.2		.	%
	8	0.3		n	
	9	0.2			
	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: [Signature] Date: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

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

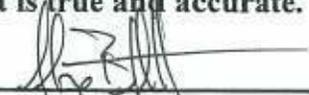
WBID # 327 SITE # 15

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	<0.1		1	CHANNEL FEATURE:
	2 <u>9.0</u> m	<0.1		2	RUN 100%
	3	0.1		3	
	4 MEASUREMENTS	0.2		4	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	0.1		5	
	6 APART	0.2		6	<u>9.06</u> PPM
	7	0.3		7	
	8	0.3		8	%
	9	0.2		9	
	10	0.1		10	
TH	1 WETTED WIDTH	<0.1		12	CHANNEL FEATURE:
	2 <u>8.3</u> m	0.2		13	RUN 100%
	3	0.6		14	
	4 MEASUREMENTS	0.6		15	DISSOLVED OXYGEN:
	5 <u>0.83</u> m	0.2		16	
	6 APART	0.2		17	<u>9.02</u> PPM
	7	<0.1		18	
	8	0.2		19	%
	9	0.5		20	
	10	0.5		21	
TI	1 WETTED WIDTH	0.2		23	CHANNEL FEATURE:
	2 <u>8.5</u> m	0.3		24	POOL 100%
	3	0.9		25	
	4 MEASUREMENTS	>1.0		26	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	>1.0		.	
	6 APART	>1.0		.	<u>9.68</u> PPM
	7	>1.0		.	
	8	>1.0		n	%
	9	>1.0			
	10	0.8			

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: 6/08/07

Organization: BLP CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 15

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	0.3		1 CHANNEL	FEATURE :
	2 <u>9.0</u> M	0.8		2 POOL 100%	
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4 DISSOLVED OXYGEN:	
	5 <u>0.9</u> M	>1.0		5 <u>9.80</u> PPM	
	6 APART	>1.0		6	
	7	>1.0		7	%
	8	>1.0		8	
	9	0.6		9	
	10	0.5		10	
TK	1 WETTED WIDTH	0.3		12 CHANNEL	FEATURE :
	2 <u>10.0</u> M	0.5		13 POOL 100%	
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15 DISSOLVED OXYGEN:	
	5 <u>1.0</u> M	>1.0		16	
	6 APART	>1.0		17 <u>10.14</u> PPM	
	7	>1.0		18	
	8	>1.0		19	%
	9	0.8		20	
	10	0.5		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: [Signature] Date: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327Site# 16

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(must be completed for each site)

Date & Time: <u>6/8/07 1230</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ KEMMER RD. (UPSTREAM OF SITE #15)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	Facility Name: <u>NON-POINT</u>
Current Weather Conditions: <u>CLEAR, 75°</u>	Permit Number: <u>N/A</u>
Weather Conditions for Past 10 days: <u>FAIR/RAIN/CLEAR</u>	
Drought Conditions?: No drought <input checked="" type="checkbox"/> Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.72678</u>	Y: <u>94.67019</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
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
<u>13, 14 327-15, 16</u>	<u>TRAN J-K</u>	<u>327-13, 14</u>	<u>TRAN B-A</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

% CHANNEL FEATURE:

RIFFLE : _____

RUN : 20

POOL : 80

* Page Two – Data Sheet B for WBID # 327 :
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	<u>20</u> % Sand	<u>80</u> % Silt	% Mud/Clay	% Bedrock
----------	----------	------------------	------------------	------------	-----------

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

MACROPHYTES PRESENT ON BOTH BANKS (AMERICAN WATER WILLOW)

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 16

TA

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	< 0.1		1	CHANNEL FEATURE:
2	<u>8.0 m</u>	0.4		2	POOL 100%
3		0.7		3	
4	MEASUREMENTS	0.8		4	DISSOLVED OXYGEN:
5	<u>0.8 m</u>	0.7		5	<u>9.95</u> PPM
6	APART	0.7		6	_____ %
7		0.6		7	
8		0.6		8	
9		0.7		9	
10		0.1		10	
				11	
1	WETTED WIDTH	0.1		12	CHANNEL FEATURE:
2	<u>10.0 m</u>	0.5		13	POOL 100%
3		0.9		14	
4	MEASUREMENTS	> 1.0		15	DISSOLVED OXYGEN:
5	<u>1.0 m</u>	> 1.0		16	
6	APART	> 1.0		17	<u>9.75</u> PPM
7		> 1.0		18	
8		> 1.0		19	_____ %
9		0.9		20	
10		0.8		21	
				22	CHANNEL FEATURE:
1	WETTED WIDTH	0.2		23	POOL 100%
2	<u>8.0 m</u>	0.7		24	
3		0.9		25	DISSOLVED OXYGEN:
4	MEASUREMENTS	> 1.0		26	
5	<u>0.8 m</u>	> 1.0		.	<u>10.13</u> PPM
6	APART	> 1.0		.	
7		> 1.0		.	_____ %
8		> 1.0		n	
9		> 1.0			
10		0.9			

TB

TC

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: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 16

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	0.7		1	CHANNEL FEATURE:
	2 <u>8.0</u> m	0.8		2	POOL 100%
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
	5 <u>0.80</u> m	>1.0		5	<u>7.90</u> PPM
	6 APART	>1.0		6	
	7	>1.0		7	%
	8	>1.0		8	
	9	>1.0		9	
	10	0.6		10	
TE	1 WETTED WIDTH	0.8		12	CHANNEL FEATURE:
	2 <u>10.0</u> m	>1.0		13	POOL 100%
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	>1.0		16	<u>9.97</u> PPM
	6 APART	>1.0		17	
	7	>1.0		18	%
	8	>1.0		19	
	9	>1.0		20	
	10	0.8		21	
TF	1 WETTED WIDTH	0.4		23	CHANNEL FEATURE:
	2 <u>7.5</u> m	0.8		24	RUN 100%
	3	>1.0		25	
	4 MEASUREMENTS	>1.0		26	DISSOLVED OXYGEN:
	5 <u>0.75</u> m	>1.0		.	<u>9.86</u> PPM
	6 APART	>1.0		.	
	7	>1.0		.	%
	8	0.8		n	
	9	0.8			
	10	0.6			

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: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 16

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 WETTED WIDTH	0.8		1	CHANNEL FEATURE:
	2 <u>10.0</u> m	>1.0		2	RUN 100%
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
	5 <u>1.0</u> m	>1.0		5	
	6 APART	>1.0		6	<u>10.05</u> PPM
	7	>1.0		7	
	8	>1.0		8	
	9	>1.0		9	
	10	0.7		10	
T _H	1 WETTED WIDTH	0.6		12	CHANNEL FEATURE:
	2 <u>9.0</u> m	>1.0		13	RUN 100%
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15	DISSOLVED OXYGEN:
	5 <u>0.90</u> m	>1.0		16	
	6 APART	>1.0		17	<u>10.9.83</u> PPM
	7	>1.0		18	
	8	>1.0		19	
	9	0.8		20	
	10	0.7		21	
T _I	1 WETTED WIDTH	0.6		23	CHANNEL FEATURE:
	2 <u>8.5</u> m	>1.0		24	POOL 100%
	3	>1.0		25	
	4 MEASUREMENTS	>1.0		26	DISSOLVED OXYGEN:
	5 <u>0.85</u> m	>1.0		.	
	6 APART	>1.0		.	<u>9.90</u> PPM
	7	>1.0		.	
	8	>1.0		n	
	9	0.8			
	10	0.7			

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: 6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 16

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	0.8		1 CHANNEL	FEATURE :
2	<u>8.0</u> M	>1.0		2	<u>Pool 100%</u>
3		>1.0		3	
4	MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
5	<u>0.80</u> M	>1.0		5	<u>9.77</u> PPM
6	APART	>1.0		6	
7		>1.0		7	<u> </u> %
8		>1.0		8	
9		>1.0		9	
10		>1.0		10	
				11	
TK 1	WETTED WIDTH	0.7		12 CHANNEL	FEATURE :
2	<u>8.5</u> M	>1.0		13	<u>Pool 100%</u>
3		>1.0		14	
4	MEASUREMENTS	>1.0		15	DISSOLVED OXYGEN:
5	<u>0.85</u> M	>1.0		16	
6	APART	>1.0		17	<u>9.63</u> PPM
7		>1.0		18	
8		>1.0		19	<u> </u> %
9		>1.0		20	
10		0.8		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: [Signature] Date: 6/9/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 17

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

Date & Time: <u>6/08/07 1300</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ SAXON RD. (SITE UPSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 75°F</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>FAIR/RAIN/CLEAR</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.71849</u>	Y: <u>094.68341</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327; 19, 20</u>	<u>UPSTREAM</u>	<u>327; 21, 22</u>	<u>DOWNSTREAM</u>	<u>327, 17, 18</u>	<u>FISHING EQUIP</u>

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: SAXON ROAD

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 30

POOL: 70

* Page Two – Data Sheet B for WBID # 327 :
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	<u>20</u> % Sand	<u>80</u> % Silt	% Mud/Clay	% Bedrock
----------	----------	------------------	------------------	------------	-----------

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

MACROPHITES PRESENT ON BANKS (AMERICAN WATER WILLOW)

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature] Date of Survey: 8/6/08/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327

SITE # 17

TA

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 WETTED WIDTH	0.5		1 CHANNEL	FEATURE :
2 <u>10</u> m	> 1.0		2 POOL	100%
3	> 1.0		3	
4 MEASUREMENTS	> 1.0		4 DISSOLVED	OXYGEN :
5 _____ m	> 1.0		5 <u>8.72</u>	PPM
6 APART	> 1.0		6 <u>8.</u>	%
7	> 1.0		7	
8	> 1.0		8	
9	> 1.0		9	
10	0.5		10	

TB

1 WETTED WIDTH	0.5		12 CHANNEL	FEATURE :
2 <u>10</u> m	> 1.0		13 RUN	100%
3	> 1.0		14	
4 MEASUREMENTS	> 1.0		15 DISSOLVED	OXYGEN :
5 _____ m	> 1.0		16	
6 APART	> 1.0		17 <u>7.50</u>	PPM
7	> 1.0		18	
8	> 1.0		19 _____	%
9	> 1.0		20	
10	0.5		21	

TC

1 WETTED WIDTH	0.5		22 CHANNEL	FEATURE :
2 <u>9</u> m	> 1.0		23 RUN	100%
3	> 1.0		24	
4 MEASUREMENTS	> 1.0		25 DISSOLVED	OXYGEN :
5 _____ m	> 1.0		26	
6 APART	> 1.0		27 <u>8.72</u>	PPM
7	> 1.0		28 _____	%
8	> 1.0		n	
9	> 1.0			
10	0.5			

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: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 17

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	0.5		1 CHANNEL	FEATURE :
	2 <u>10</u> m			2 POOL	100%
	3			3	
	4 MEASUREMENTS			4 DISSOLVED OXYGEN:	
	5 <u> </u> m			5 <u>8.75</u> PPM	
	6 APART			6	
	7			7	%
	8			8	
	9			9	
	10		0.5	10	
TE	1 WETTED WIDTH	0.5		12 CHANNEL	FEATURE :
	2 <u>8</u> m	> 1.0		13 POOL	100%
	3	> 1.0		14	
	4 MEASUREMENTS	> 1.0		15 DISSOLVED OXYGEN:	
	5 <u> </u> m	> 1.0		16 <u>8.72</u> PPM	
	6 APART	> 1.0		17	
	7	> 1.0		18	%
	8	> 1.0		19	
	9	> 1.0		20	
	10		0.5	21	
TF	1 WETTED WIDTH	0.5		23 CHANNEL	FEATURE :
	2 <u>10</u> m	> 1.0		24 POOL	100%
	3	> 1.0		25	
	4 MEASUREMENTS	> 1.0		26 DISSOLVED OXYGEN:	
	5 <u> </u> m	> 1.0		. <u>8.80</u> PPM	
	6 APART	> 1.0		.	
	7	> 1.0		.	%
	8	> 1.0		n	
	9	> 1.0			
	10		0.5		

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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Signed: [Signature] Date: 6/8/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 17

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	0.5		1	CHANNEL FEATURE:
	2 <u>10</u> m	> 1.0		2	POOL 100%
	3	> 1.0		3	
	4 MEASUREMENTS	> 1.0		4	DISSOLVED OXYGEN:
	5 _____ m	> 1.0		5	
	6 APART	> 1.0		6	<u>8.78</u> PPM
	7	> 1.0		7	
	8	> 1.0		8	_____ %
	9	> 1.0		9	
	10	10 0.5		10	
TH	1 WETTED WIDTH	0.5		12	CHANNEL FEATURE:
	2 <u>12</u> m	> 1.0		13	POOL 100%
	3	> 1.0		14	
	4 MEASUREMENTS	> 1.0		15	DISSOLVED OXYGEN:
	5 _____ m	> 1.0		16	
	6 APART	> 1.0		17	<u>8.77</u> PPM
	7	> 1.0		18	
	8	> 1.0		19	_____ %
	9	> 1.0		20	
	10	0.5		21	
TI	1 WETTED WIDTH	0.5		23	CHANNEL FEATURE:
	2 <u>10</u> m	> 1.0		24	POOL 100%
	3	> 1.0		25	
	4 MEASUREMENTS	> 1.0		26	DISSOLVED OXYGEN:
	5 _____ m	> 1.0		.	
	6 APART	> 1.0		.	<u>8.78</u> PPM
	7	> 1.0		.	
	8	> 1.0		n	_____ %
	9	> 1.0			
	10	0.5			

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: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID # 327 SITE # 17

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ1	WETTED WIDTH	0.5		1 CHANNEL	FEATURE :
2	<u>12</u> M	>1.0		2 POOL	100%
3		>1.0		3	
4	MEASUREMENTS	>1.0		4 DISSOLVED OXYGEN:	
5	<u> </u> M	>1.0		5 <u>8.87</u> PPM	
6	APART	>1.0		6	
7		>1.0		7	%
8		>1.0		8	
9		>1.0		9	
10		0.5		10	
				11	
TK1	WETTED WIDTH	0.5		12 CHANNEL	FEATURE :
2	<u>10</u> M	>1.0		13 POOL	100%
3		>1.0		14	
4	MEASUREMENTS	>1.0		15 DISSOLVED OXYGEN:	
5	<u> </u> M	>1.0		16	
6	APART	>1.0		17 <u>8.79</u> PPM	
7		>1.0		18	
8		>1.0		19	%
9		>1.0		20	
10		0.5		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: [Signature] Date: 1/8/07

Organization: BWR CORP. Position: ENV. SCI.

WBID# 327
 Site# 18

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

Date & Time: <u>6/8/07 1400</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ SAXON RD. (DOWNSTREAM)</u>
Personnel (Data Collectors): <u>BARTLETT & CASEY</u>	
Current Weather Conditions: <u>CLEAR, 75°</u>	Facility Name: <u>NON-POINT</u>
Weather Conditions for Past 10 days: <u>RAIN, FAIR, CL.</u>	Permit Number: <u>N/A</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>39.71794</u>	Y: <u>094.68442</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>327-25,26</u>	<u>UPSTREAM</u>	<u>327-23,24</u>	<u>DOWNSTREAM</u>		

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

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments:

SAXON RD.

% CHANNEL FEATURE:

RIFFLE: _____

RUN: 20

POOL: 80

* Page Two – Data Sheet B for WBID # 327 :
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	<u>10</u> % Sand	<u>90</u> % Silt	% Mud/Clay	% Bedrock
----------	----------	------------------	------------------	------------	-----------

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

MACROPHYTES PRESENT ON BOTH BANKS

Water Characteristics*: (Mark all that apply.)

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

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

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

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

Surveyor's Signature: [Signature]

Date of Survey: 6/8/07

Organization: PLWR CORP.

Position: ENV. SCI.

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

WBID # 327

SITE # 18

TA

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 WETTED WIDTH	0.5		1 CHANNEL	FEATURE:
2 <u>8</u> m	>1.0		2 RUN	100%
3	>1.0		3	
4 MEASUREMENTS	>1.0		4 DISSOLVED OXYGEN:	
5 _____ m	>1.0		5 <u>8.43</u>	PPM
6 APART	>1.0		6 _____	%
7	>1.0		7	
8	>1.0		8	
9	>1.0		9	
10	0.5		10	

TB

1 WETTED WIDTH	0.5		12 CHANNEL	FEATURE:
2 <u>12</u> m	>1.0		13 RUN	100%
3	>1.0		14	
4 MEASUREMENTS	>1.0		15 DISSOLVED OXYGEN:	
5 _____ m	>1.0		16	
6 APART	>1.0		17 <u>8.55</u>	PPM
7	>1.0		18	
8	>1.0		19 _____	%
9	>1.0		20	
10	0.5		21	

TC

1 WETTED WIDTH	0.5		22 CHANNEL	FEATURE:
2 <u>10</u> m	>1.0		23 RUN	50%
3	>1.0		24 POOL	50%
4 MEASUREMENTS	>1.0		25 DISSOLVED OXYGEN:	
5 _____ m	>1.0		26	
6 APART	>1.0		27 <u>8.65</u>	PPM
7	>1.0		28 _____	%
8	>1.0		n	
9	>1.0			
10	0.5			

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: 6/8/07

Organization: BWR CORP.

Position: ENV. SCI.

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

WBID # 327 SITE # 18

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TD	1 WETTED WIDTH	0.5		1 CHANNEL	FEATURE :
	2 <u>10</u> m	>1.0		2 POOL	100%
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4 DISSOLVED OXYGEN:	
	5 _____ m	>1.0		5 <u>8.99</u> PPM	
	6 APART	>1.0		6	
	7	>1.0		7	%
	8	>1.0		8	
	9	>1.0		9	
	10	0.5		10	
TE	1 WETTED WIDTH	0.5		12 CHANNEL	FEATURE :
	2 <u>12</u> m	>1.0		13 POOL	100%
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15 DISSOLVED OXYGEN:	
	5 _____ m	>1.0		16 <u>8.61</u> PPM	
	6 APART	>1.0		17	
	7	>1.0		18	%
	8	>1.0		19	
	9	>1.0		20	
	10	0.5		21	
TF	1 WETTED WIDTH	0.5		23 CHANNEL	FEATURE :
	2 <u>12</u> m	>1.0		24 POOL	100%
	3	>1.0		25	
	4 MEASUREMENTS	>1.0		26 DISSOLVED OXYGEN:	
	5 _____ m	>1.0		. <u>8.68</u> PPM	
	6 APART	>1.0		.	
	7	>1.0		.	%
	8	>1.0		n	
	9	>1.0			
	10	0.5			

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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Signed: [Signature] Date: 6/8/07

Organization: BWR CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 18

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TG	1 WETTED WIDTH	0.5		1	CHANNEL FEATURE:
	2 <u>10</u> m	>1.0		2	POOL 100%
	3	>1.0		3	
	4 MEASUREMENTS	>1.0		4	DISSOLVED OXYGEN:
	5 _____ m	>1.0		5	
	6 APART	>1.0		6	<u>8.59</u> PPM
	7	>1.0		7	
	8	>1.0		8	_____%
	9	>1.0		9	
	10	0.5		10	
TH	1 WETTED WIDTH	0.5		12	CHANNEL FEATURE:
	2 <u>10</u> m	>1.0		13	POOL 100%
	3	>1.0		14	
	4 MEASUREMENTS	>1.0		15	DISSOLVED OXYGEN:
	5 _____ m	>1.0		16	
	6 APART	>1.0		17	<u>8.70</u> PPM
	7	>1.0		18	
	8	>1.0		19	_____%
	9	>1.0		20	
	10	0.5		21	
TI	1 WETTED WIDTH	0.5		23	CHANNEL FEATURE:
	2 <u>12</u> m	>1.0		24	POOL 100%
	3	>1.0		25	
	4 MEASUREMENTS	>1.0		26	DISSOLVED OXYGEN:
	5 _____ m	>1.0		.	
	6 APART	>1.0		.	<u>8.61</u> PPM
	7	>1.0		.	
	8	>1.0		n	_____%
	9	>1.0			
	10	0.5			

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Signed: [Signature] Date: 6/8/07

Organization: BWP CORP. Position: ENV. SCI.

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

WBID# 327 SITE# 18

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
TJ	1 WETTED WIDTH	0.5		1 CHANNEL	FEATURE :
	2 <u>10</u> M	> 1.0		2 POOL	100%
	3	> 1.0		3	
	4 MEASUREMENTS	> 1.0		4 DISSOLVED OXYGEN:	
	5 <u> </u> M	> 1.0		5 <u>8.59</u> PPM	
	6 APART	> 1.0		6	
	7	> 1.0		7 <u> </u> %	
	8	> 1.0		8	
	9	> 1.0		9	
	10	0.5		10	
TK	1 WETTED WIDTH	0.5		12 CHANNEL	FEATURE :
	2 <u>10</u> M	> 1.0		13 POOL	100%
	3	> 1.0		14	
	4 MEASUREMENTS	> 1.0		15 DISSOLVED OXYGEN:	
	5 <u> </u> M	> 1.0		16	
	6 APART	> 1.0		17 <u>9.16</u> PPM	
	7	> 1.0		18	
	8	> 1.0		19 <u> </u> %	
	9	> 1.0		20	
	10	0.5		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.

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Signed: [Signature] Date: 6/8/07

Organization: BWR CORP Position: ENV. SCI.



Downstream (Site 1) of Third Fork Platte River



Downstream (Site 1) of Third Fork Platte River



Upstream (Site 1) of Third Fork Platte River



Upstream (Site 1) of Third Fork Platte River



Downstream (Site 2) of Third Fork Platte River



Downstream (Site 2) of Third Fork Platte River



Upstream (Site 2) of Third Fork Platte River



Upstream (Site 2) of Third Fork Platte River



Downstream (Site 3) of Third Fork Platte River



Downstream (Site 3) of Third Fork Platte River



Upstream (Site 3) of Third Fork Platte River



Upstream (Site 3) of Third Fork Platte River



Downstream (Site 4) of Third Fork Platte River



Downstream (Site 4) of Third Fork Platte River



Upstream (Site 4) of Third Fork Platte River



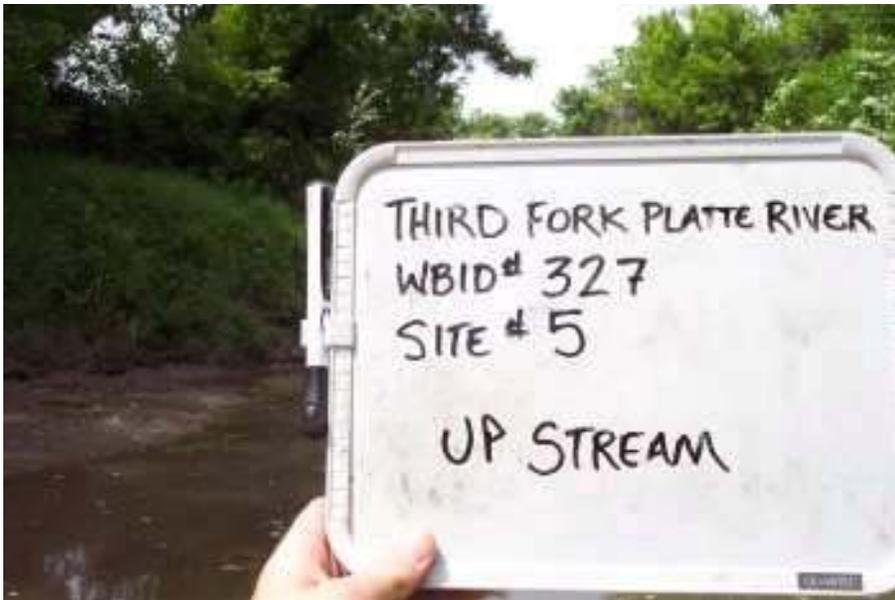
Upstream (Site 4) of Third Fork Platte River



Downstream (Site 5) of Third Fork Platte River



Downstream (Site 5) of Third Fork Platte River



Upstream (Site 5) of Third Fork Platte River



Upstream (Site 5) of Third Fork Platte River



Downstream (Site 6) of Third Fork Platte River



Downstream (Site 6) of Third Fork Platte River



Upstream (Site 6) of Third Fork Platte River



Upstream (Site 6) of Third Fork Platte River



Downstream (Site 7) of Third Fork Platte River



Downstream (Site 7) of Third Fork Platte River



Upstream (Site 7) of Third Fork Platte River



Upstream (Site 7) of Third Fork Platte River



Downstream (Site 8) of Third Fork Platte River



Downstream (Site 8) of Third Fork Platte River



Upstream (Site 8) of Third Fork Platte River



Upstream (Site 8) of Third Fork Platte River



Downstream (Site 9) of Third Fork Platte River



Downstream (Site 9) of Third Fork Platte River



Upstream (Site 9) of Third Fork Platte River



Upstream (Site 9) of Third Fork Platte River



Downstream (Site 10) of Third Fork Platte River



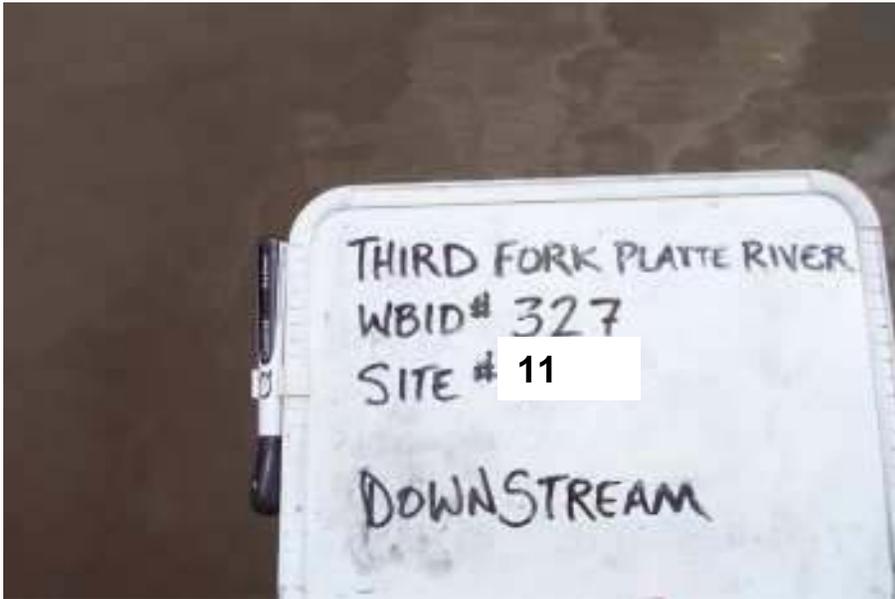
Downstream (Site 10) of Third Fork Platte River



Upstream (Site 10) of Third Fork Platte River



Upstream (Site 10) of Third Fork Platte River



Downstream (Site 11) of Third Fork Platte River



Downstream (Site 11) of Third Fork Platte River



Upstream (Site 11) of Third Fork Platte River



Upstream (Site 11) of Third Fork Platte River



Downstream (Site 12) of Third Fork Platte River



Downstream (Site 12) of Third Fork Platte River



Upstream (Site 12) of Third Fork Platte River



Upstream (Site 12) of Third Fork Platte River



Downstream (Site 13) of Third Fork Platte River



Downstream (Site 13) of Third Fork Platte River



Upstream (Site 13) of Third Fork Platte River



Upstream (Site 13) of Third Fork Platte River



Downstream (Site 14) of Third Fork Platte River



Downstream (Site 14) of Third Fork Platte River



Upstream (Site 14) of Third Fork Platte River



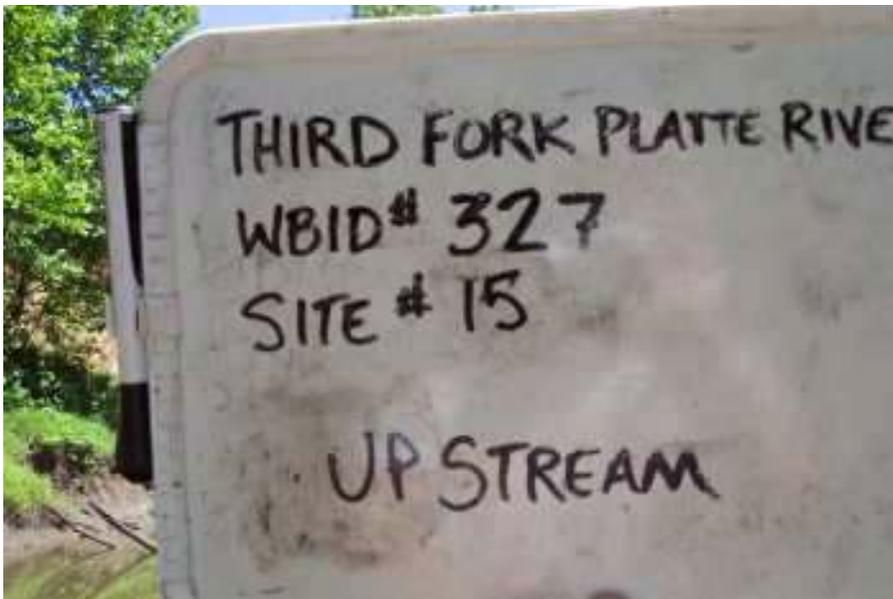
Downstream (Site 14) of Third Fork Platte River



Downstream (Site 15) of Third Fork Platte River



Downstream (Site 15) of Third Fork Platte River



Upstream (Site 15) of Third Fork Platte River



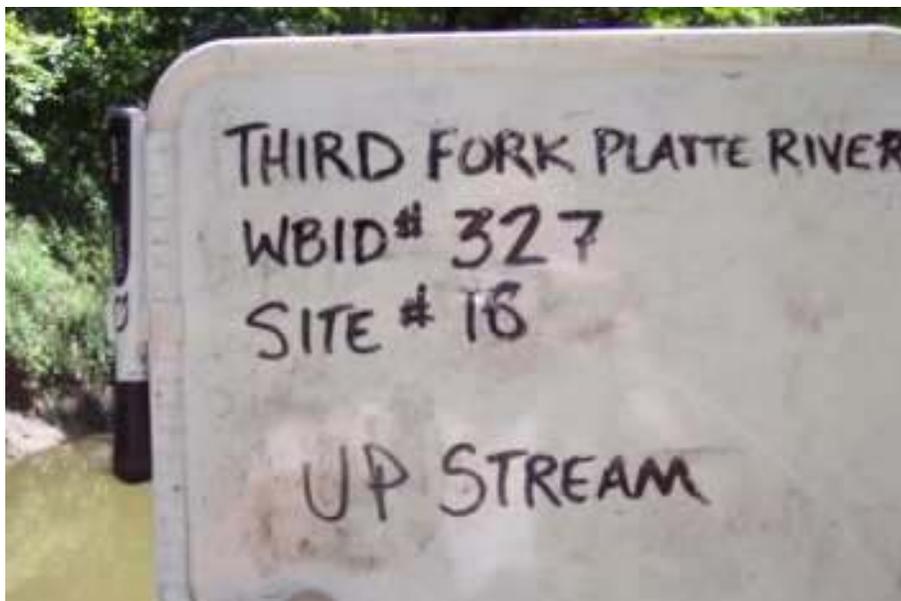
Upstream (Site 15) of Third Fork Platte River



Downstream (Site 16) of Third Fork Platte River



Downstream (Site 16) of Third Fork Platte River



Upstream (Site 16) of Third Fork Platte River



Upstream (Site 16) of Third Fork Platte River



Downstream (Site 17) of Third Fork Platte River



Downstream (Site 17) of Third Fork Platte River



Upstream (Site 17) of Third Fork Platte River



Upstream (Site 17) of Third Fork Platte River



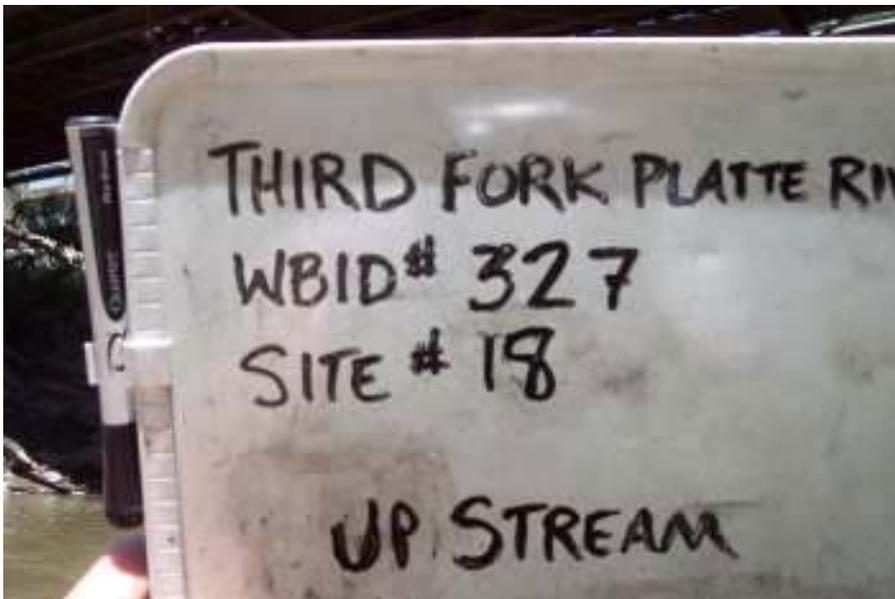
Upstream (Site 17) of Third Fork Platte River: Footprints and Fishing Tackle



Downstream (Site 18) of Third Fork Platte River



Downstream (Site 18) of Third Fork Platte River



Upstream (Site 18) of Third Fork Platte River



Upstream (Site 18) of Third Fork Platte River