



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1608 Bigelow's Creek

Submitted by

Missouri Department of Natural Resources

to

Missouri Department of Natural Resources
Water Protection Program

Date received: October 15, 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):	Bigelow's Creek
Missouri Water Body Identification (WBID) Number:	1608
8-digit HUC:	County: St. Charles County
Upstream Legal Description (from Table H):	15.44N, 01E
Downstream Legal Description (from Table H):	mouth
Number of sites evaluated	3
List all sites numbers, listed cnssequantly upstream to downstream:	1, 2, 3

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):	Augusta WWTP
Discharger Permit Number(s):	MO 0121363

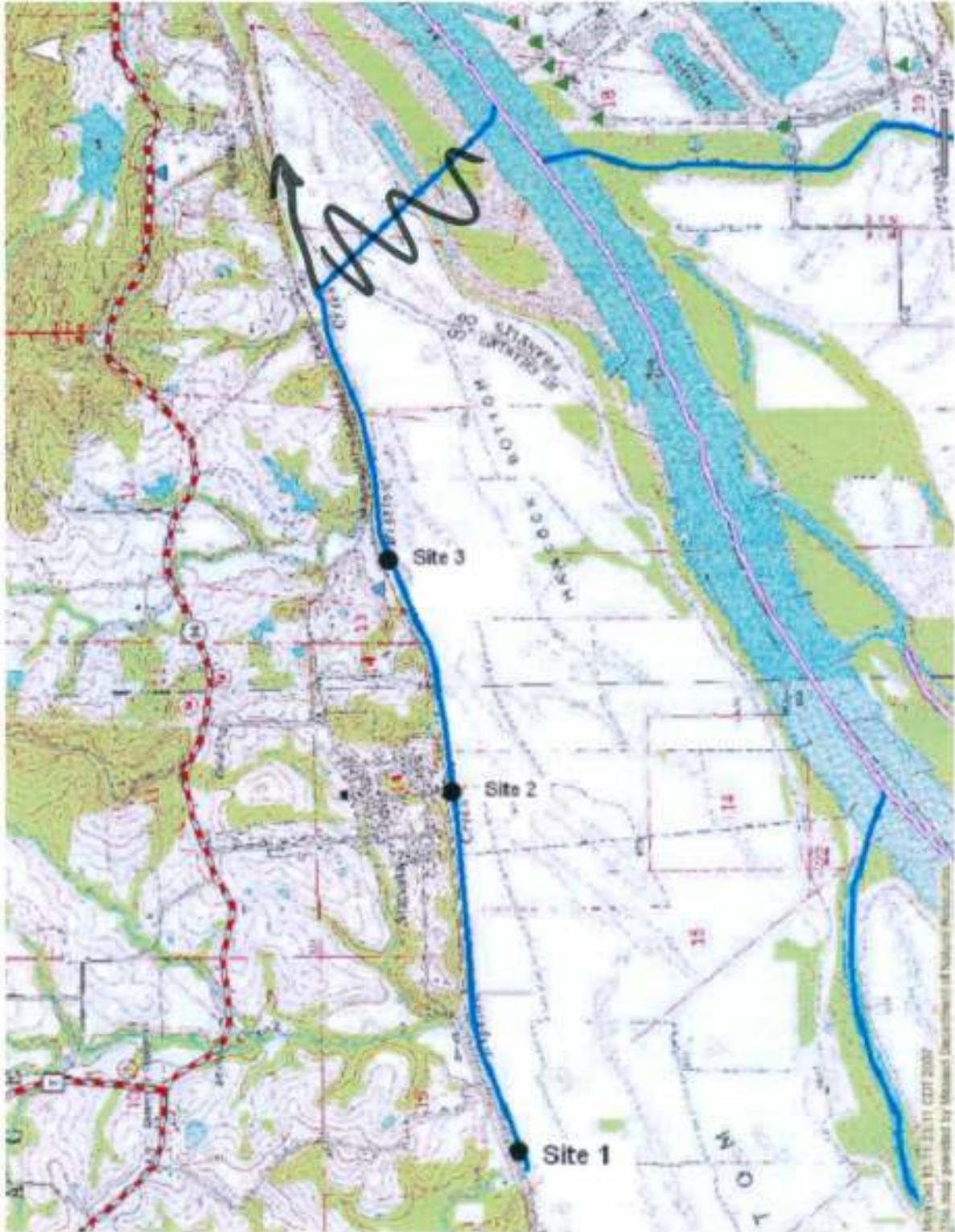
IV. UAA Surveyor (please print legibly)

Name of Surveyor	Mary Clark & Priscilla Stotts	Telephone Number:	573-526-3406
Organization/Employer:	Mo DNR		
Position:	ES/ITS		

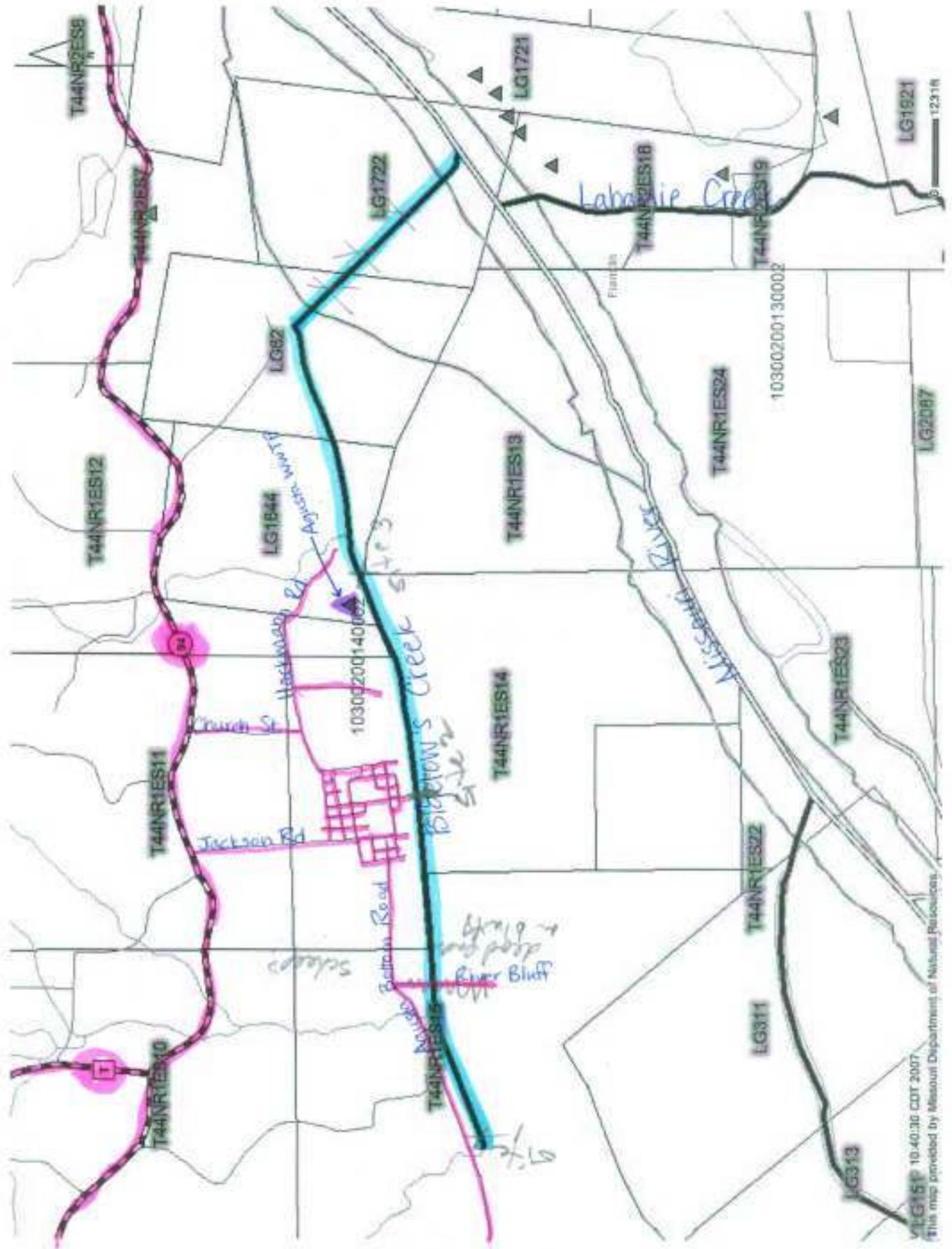
Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Signed: Priscilla Stotts Date: 10-11-2007

PAIR Site 3 = PR + S1
Site 1



Jill LeRoy



Bigelow's Creek 3.7 miles

OCT 15 2007

WATER PROTECTION PROGRAM

WBID# 1608
Site# 1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(must be completed for each site)

Date & Time: <u>10-11-07 2:38</u>	Site Location Description (e.g., road crossing): <u>Katy trail Bridge over Bigelow school rd.</u>
Personnel (Data Collectors): <u>m clark P STOKES</u>	Facility Name:
Current Weather Conditions: <u>Sunny</u>	Permit Number:
Weather Conditions for Past 10 days:	
Drought Conditions?: No drought <input 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"/> <u>yes</u>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>N 38.56666</u>	Y: <u>W 090.9847</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 ± <u>23.0</u> Feet or ± <u>7.01</u> 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</u> <u>628</u>	<u>US</u>				
<u>14</u> <u>630</u>	<u>Bridge sign</u>	<u>629-15</u>	<u>DS</u>		

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

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

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

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input checked="" type="checkbox"/> Nature trails <u>Katy</u>	<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 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 type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	
Comments:					

(Include photographs)

site 1

* Page Two – Data Sheet B for WBID # 1608 :

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	dry				
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	dry				
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)

heavy vegetation in dry stream + bird nests in stream

Water Characteristics*: (Mark all that apply.)

no water present

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" 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:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input checked="" 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: Priscilla Stette Date of Survey: 10-11-2007

Organization: MO DNR Position: ES III

site 2

WBID# 1608

Field Data Sheets for Recreational Use Stream Surveys

Site# 2

at water st + bridge

Data Sheet B - Site Characterization

(must be completed for each site)

by *[handwritten]*

Date & Time: 10-11-07 2:13	Site Location Description (e.g., road crossing): <i>Bridge crossing Public St over Birch rd to Ball Park</i>
Personnel (Data Collectors):	
Current Weather Conditions:	Facility Name:
Weather Conditions for Past 10 days:	Permit Number:
Drought Conditions?: No drought <input 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: 138,56946	Y: 4090,8109
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 ± 16.9 Feet or ± 5.15 Meters	± _____ Feet or ± _____ Meters
PDCP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
623	US Dr-4	627-11	DS - dry		
624-26	LA 9/11/07 - 021				

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

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

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

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

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

Comments:

Indications of Human Use*: (attach photos)

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

Comments: none

WBID# 1608
 Site# 2

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization
 (must be completed for each site)

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites		<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input checked="" type="checkbox"/> Other:
Comments: <p style="text-align: center;">none</p>					

Stream Morphology:

Access View's Physical Descriptions: 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	0	4.2 m	10.6 m		

US & DS View's Physical Descriptions: 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					0
RUN					0
POOL					0

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

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

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Water Characteristics*: (Mark all that apply.)

ODOR:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
COLOR:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
BOTTOM DEPOSIT:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
WATER SURFACE DEPOSITION:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments to this form.

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

Surveyor's Signature: Brian Stette Date of Survey: 10-11-2007
 Organization: MO DNR Position: ESTT

Field Data Sheets for Recreational Use Stream Surveys

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

T1
upstream

T2
US of
bridge

T3
ds of
bridge

T4
DS

Distance from Stream edge (m)	Depth (m)	Rank	Assigned Rank	Sorted depth
			1	
			2	
	↑		3	
	dry		4	
			5	
			6	
			7	
.6	.15		8	
			9	
2.1	.17		10	
			11	
3.35	.13		12	
			13	
			14	
			15	
			16	
.9	.18		17	
			18	
2.1	.18		19	
			20	
3.3	.14		21	
			22	
			23	
			24	
	DRY		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.

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

Signed: Priscilla Stotts Date: 10-11-2007

Organization: SMDPDK Position: ES III

max .18
median 0

WBID# 1608

Site# 3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(must be completed for each site)

Date & Time: 10-11-07 3:10	Site Location Description (e.g., road crossing): 150' ⁴⁵ at bridge near Katy dr. below WWTP
Personnel (Data Collectors): Mary Clark / PS	Facility Name:
Current Weather Conditions: clear	Permit Number:
Weather Conditions for Past 10 days:	
Drought Conditions?: No drought <input 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: N 38.57213	Y: W 090.86745
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the location of 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	
FCM	± _____ Meters
EPE	± 20.7 Feet or ± 6.31 Meters
PDOP	± _____ Feet or ± _____ Meters
Source Map Scale: 1:24,000 1:100,000 Other _____	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
16) 031	near USGS monitor	- video	clip		

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 checked="" type="checkbox"/> Nature trails Katy	<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: Ag lands WWTP - Katy trail

Indications of Human Use*: (attach photos)

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

(Include photographs)

• Page Two – Data Sheet B for WBID # 3 ^{Side} :

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		3.5	150m		
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			Sand or silt		
POOL					

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

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

lots of Lemna + water cress + other wetland plants

Water Characteristics*: (Mark all that apply.)

Odor:	<input checked="" type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input 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-blk
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.

only water is below WWTP discharge

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

Surveyor's Signature: Priscilla Steth Date of Survey: 10-11-2007

Organization: MO DNR Position: ES III

WBID# _____
 Site# 3

Field Data Sheets for Recreational Use Stream Surveys

*length
 by site is
 150m*

75m DS of Katy Trail Bridge access

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

Distance from Stream edge M	Depth M	Rank	Assigned Rank	Sorted depth
0.3	0.1 (m)		1	
0.6	0.15		2	
0.9	0.2		3	
1.2	0.2		4	
1.5	0.2		5	
1.8	0.15		6	
2.1	0.15		7	
2.4	0.1		8	
2.7	0.1		9	
3.0	0.1		10	
3.3	0.15		11	
3.6	0.2		12	
3.9	0.2		13	
4.2	0.25		14	
4.5	0.25		15	
4.8	0.2		16	
5.1	0.15		17	
5.4	0.15		18	
5.7	0.05		19	
6.0	0.1		20	
6.3	0.1		21	
6.6	0.15		22	
6.9	0.2		23	
7.2	0.25		24	
7.5	0.25		25	
7.8	0.2		26	
8.1	0.15		.	
8.4	0.15		.	
8.7	0.05		.	
			n	

*DS
 DS
 access*

DS 1

DS 2

DS 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.

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

Signed: Priscilla Stotts Date: 10-11-07

Organization: WMO DNR Position: _____

*max. 25
 median .15*

WBID# _____
 Site# 3

Field Data Sheets for Recreational Use Stream Surveys

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

Distance from Stream edge <i>m</i>	Depth <i>m</i>	Rank	Assigned Rank	Sorted depth
			1	
			2	
			3	
			4	
			5	
			6	
			7	
			8	
			9	
0.3	0.1		10	
0.6	0.1		11	
0.9	0.175		12	
1.2	0.2		13	
1.5	0.175		14	
1.8	0.175		15	
2.1	0.1		16	
2.4	0.1		17	
0.3	0.1		18	
0.6	0.15		19	
0.9	0.15		20	
1.2	0.15		21	
1.5	0.1		22	
1.8	0.1		23	
2.1	0.175		24	
0.3	0.1		25	
0.6	0.15		26	
0.9	0.2		.	
1.2	0.175		.	
1.5	0.1		.	
1.8	0.1		n	
2.1	0.05			

DS of access

004

005

006

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.

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

Signed: Bruce Statta Date: 10-11-2007

Organization: SMO-DNR Position: _____

Max .25
Median .15

Site 1 Bridge Sign Photo 14 WBID# 1608



Site 1 Upstream Photo 13 WBID# 1608



Site 1

Downstream

Photo 15

WBID# 1608



Site 2

Pool at Bridge

Photo 12

WBID# 1608



Site 2

Upstream- Dry

Photo 9

WBID# 1608



Site 2

Pool at Bridge

Photo 10

WBID# 1608



Site 2

Downstream

Photo 11

WBID# 1608

