



Use Attainability Analysis

for

WBID 0953 Dry Fork

Submitted by
MEC Water Resources

To

Missouri Department of Natural Resources
Water Protection Program

On

May 29, 2008

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): Dry Fk.
Missouri Water Body Identification (WBID) Number: 0953
8-digit HUC: 10300102
County(ies), Listed Upstream to Downstream: Moniteau
Upstream Legal Description (from Table H): 28, 45N, 16W
Downstream Legal Description (from Table H): Mouth
Number of sites evaluated: 3
List all site numbers, <u>consecutively upstream to downstream</u> : Site 1: Confluence of Dry Fork and unknown stream Site 2: Reno Hill Rd. crossing Site 3: Springer Hill Rd. crossing
Include a Site Location Map(s). The map must include all requirements detailed in the <i>Missouri Recreational Use Attainability Analyses: Water Body Survey and Assessment Protocol</i> (Section IV.D.8.a).

II. Facility Information (list all permitted discharges to this water body segment)

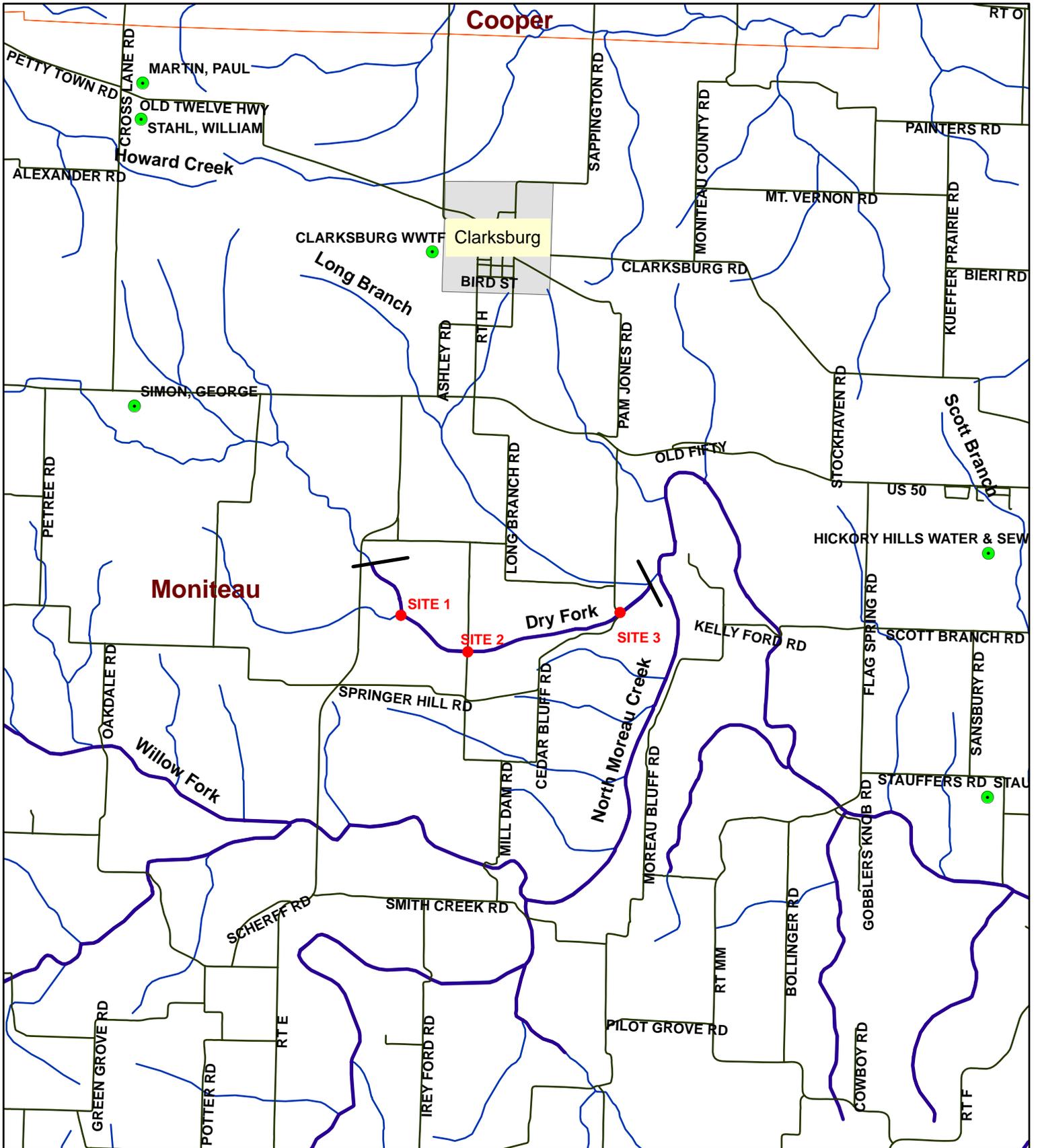
Facility Name(s) and Permit Number(s): Clarksburg WWTF MO 0109797

III. UAA Surveyor (please PRINT legibly)

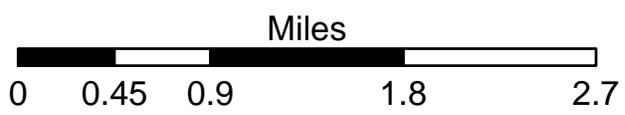
Name of Surveyor: Renee Martin	Telephone Number: 573-875-7844
Organization/Employer: AE Solutions	

Please verify that you have completed all sections of all data sheets, checked all applicable boxes, provided a map (that includes all requirements listed in the *Missouri Recreational Use Attainability Analyses: Water Body Survey and Assessment Protocol*) and that this form is complete.

Signed: _____ Date: _____



**Dry Fork
WBID 0953
Moniteau County**



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 1 of 3)
(must be completed for each site)

Date & Time: 5/1/08 08:15	Location Description (e.g., road crossing):
Stream Name: Dry Fork Creek	Confluence of Dry Fork and unknown stream
Current Weather Conditions: partly cloudy	Facility Name(s): Clarksburg WWTF
Weather Conditions for Past 10 days: 1.07" precipitation	Permit Number(s): MO 0109797
Official Drought Conditions at time of this survey (search DNR home page for "drought"): 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 Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 0527975	Northing (UTM Y): 4275010	Horizontal Accuracy: (EPE / FOM / PDOP) 22 feet
Site 11	Easting (UTM X): 0528118	Northing (UTM Y): 4274921	Horizontal Accuracy: (EPE / FOM / PDOP) 21 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
3018	upstream	3019	downstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

Uses Observed*: (Uses actually observed at the 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 <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

Site # 01

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 2 of 3)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: Private property Pasture				

Evidence of Human Use*: (Attach photos and reference in “Photos” section.)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input checked="" type="checkbox"/> Livestock Watering
<input type="checkbox"/> None of the above	Comments / Other:			

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

-% Cobble	80% Gravel	-% Sand	-% Silt	-% Mud/Clay	20% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

Benthic algae covering 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 checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*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 affect another use.

Site # 01

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Printed Names of Personnel Collecting Data: Renee Martin/ Jennifer Hrabik

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u> Dry Fork Creek </u> Waterbody ID: <u> 0953 </u> Site #: <u> 0953_01 </u> Estimated Channel Incision: <u> 0.10 </u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u> 527975 </u> UTM Y: <u> 4275010 </u> +/- <u> 22 </u> (feet) 11 UTM X: <u> 528118 </u> UTM Y: <u> 4274921 </u> +/- <u> 21 </u> (feet) Average Stream Width: <u> 5.8 </u> (meters) Length of Survey Segment: <u> 150 </u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u> Renee Martin/ Jennifer Hrabik </u>	<h4 style="text-align: center; margin: 0;">Dissolved Oxygen</h4> Date: <u> 5/1/2008 </u> Time: <u> 8:15 </u> Dissolved Oxygen: <u> 9.64 </u> (mg/L) Dissolved Oxygen: <u> 97.3 </u> (% sat) Specific Cond: <u> 363.0 </u> (µS/cm) Water Temperature: <u> 15.0 </u> (°C)
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Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0.39	0.05	0.40	0.17	0.35	0.07	0.43	0.03	0.30	0.01	0.50	0.13	0.72	0.15	0.60	0.09	0.85	0.26	0.90	0.10	0.90	0.24
	2	0.78	0.08	0.80	0.52	0.70	0.10	0.86	0.21	0.60	0.03	1.00	0.17	1.44	0.09	1.20	0.19	1.70	0.28	1.80	0.10	1.80	0.27
	3	1.17	0.09	1.20	0.68	1.05	0.23	1.29	0.16	0.90	0.02	1.50	0.15	2.16	0.20	1.80	0.23	2.55	0.31	2.70	0.08	2.70	0.27
	4	1.56	0.13	1.60	0.71	1.40	0.27	1.72	0.15	1.20	0.06	2.00	0.20	2.88	0.19	2.40	0.27	3.40	0.34	3.60	0.10	3.60	0.26
	5	1.95	0.12	2.00	0.87	1.75	0.39	2.15	0.15	1.50	0.06	2.50	0.18	3.60	0.20	3.00	0.27	4.25	0.46	4.50	0.18	4.50	0.26
	6	2.34	0.06	2.40	0.80	2.10	0.41	2.58	0.07	1.80	0.10	3.00	0.20	4.32	0.24	3.60	0.27	5.10	0.46	5.40	0.16	5.40	0.26
	7	2.73	0.01	2.80	0.63	2.45	0.27	3.01	0.09	2.10	0.05	3.50	0.19	5.04	0.25	4.20	0.36	5.95	0.54	6.30	0.12	6.30	0.19
	8	3.12	0.06	3.20	0.38	2.80	0.18	3.44	0.07	2.40	0.01	4.00	0.06	5.76	0.27	4.80	0.34	6.80	0.56	7.20	0.15	7.20	0.19
	9	3.51	0.17	3.60	0.05	3.15	0.12	3.87	0.01	2.70	0.01	4.50	0.10	6.48	0.27	5.40	0.32	7.65	0.52	8.10	0.05	8.10	0.15
Right Bank		3.90	0.00	4.00	0.00	3.50	0.00	4.30	0.00	3.00	0.00	5.00	0.00	7.20	0.00	6.00	0.00	8.50	0.00	9.00	0.00	9.00	0.00
Feature Type <small>(riffle, run, or pool)</small>		Run		Pool		Run		Riffle		Riffle		Run		Run		Run		Pool		Run		Run	

TWC

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Surveyor's Signature: _____ Date: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 1 of 3)
(must be completed for each site)

Date & Time: 5/1/08 08:40	Location Description (e.g., road crossing):
Stream Name: Dry Fork Creek	Reno Hill Rd. crossing
Current Weather Conditions: partly cloudy	Facility Name(s): Clarksburg WWTF
Weather Conditions for Past 10 days: 1.07" precipitation	Permit Number(s): MO 0109797
Official Drought Conditions at time of this survey (search DNR home page for "drought"): 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 Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 0528723	Northing (UTM Y): 4274602	Horizontal Accuracy: (EPE / FOM / PDOP) 27 feet
Site 11	Easting (UTM X): 0528906	Northing (UTM Y): 4274594	Horizontal Accuracy: (EPE / FOM / PDOP) 32 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
3021	upstream	3022	downstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

Uses Observed*: (Uses actually observed at the 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 <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

Site # 02

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 2 of 3)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: Private property Pasture				

Evidence of Human Use*: (Attach photos and reference in "Photos" section.)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input checked="" type="checkbox"/> Livestock Watering
<input type="checkbox"/> None of the above	Comments / Other:			

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

-% Cobble	90% Gravel	-% Sand	-% Silt	-% Mud/Clay	10% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

Benthic algae

Water Characteristics*: (Mark all that apply.)

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

*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 affect another use.

Site # 02

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Printed Names of Personnel Collecting Data: Renee Martin and Jennifer Hrabik

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u> Dry Fork Creek </u> Waterbody ID: <u> 0953 </u> Site #: <u> 0953_02 </u> Estimated Channel Incision: <u> 0.20 </u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u> 528723 </u> UTM Y: <u> 4274602 </u> +/- <u> 27 </u> (feet) 11 UTM X: <u> 528906 </u> UTM Y: <u> 4274594 </u> +/- <u> 32 </u> (feet) Average Stream Width: <u> 7.0 </u> (meters) Length of Survey Segment: <u> 150 </u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u> Renee Martin/ Jennifer Hrabik </u>	<h4 style="text-align: center; margin: 0;">Dissolved Oxygen</h4> Date: <u> 5/1/2008 </u> Time: <u> 8:40 </u> Dissolved Oxygen: <u> 8.36 </u> (mg/L) Dissolved Oxygen: <u> 81.3 </u> (% sat) Specific Cond: <u> 366.0 </u> (µS/cm) Water Temperature: <u> 15.2 </u> (°C)
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Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1.13	0.06	0.56	0.03	0.50	0.17	0.60	0.25	0.82	0.08	0.61	0.02	0.45	0.06	0.67	0.08	0.68	0.07	0.90	0.17	0.82	0.07
	2	2.26	0.09	1.12	0.04	1.00	0.06	1.20	0.25	1.64	0.10	1.22	0.03	0.90	0.10	1.34	0.08	1.36	0.20	1.80	0.27	1.64	0.07
	3	3.39	0.05	1.68	0.04	1.50	0.01	1.80	0.24	2.46	0.06	1.83	0.01	1.35	0.20	2.01	0.12	2.04	0.16	2.70	0.26	2.46	0.06
	4	4.52	0.05	2.24	0.04	2.00	0.03	2.40	0.19	3.28	0.01	2.44	0.07	1.80	0.38	2.68	0.10	2.72	0.17	3.60	0.21	3.28	0.13
	5	5.65	0.13	2.80	0.04	2.50	0.04	3.00	0.17	4.10	0.08	3.05	0.06	2.25	0.28	3.35	0.15	3.40	0.18	4.50	0.19	4.10	0.16
	6	6.78	0.16	3.36	0.06	3.00	0.08	3.60	0.16	4.92	0.07	3.66	0.08	2.70	0.27	4.02	0.10	4.08	0.17	5.40	0.17	4.92	0.16
	7	7.91	0.23	3.92	0.07	3.50	0.06	4.20	0.13	5.74	0.04	4.27	0.17	3.15	0.20	4.69	0.15	4.76	0.23	6.30	0.15	5.74	0.15
	8	9.04	0.25	4.48	0.06	4.00	0.02	4.80	0.08	6.56	0.06	4.88	0.10	3.60	0.21	5.36	0.17	5.44	0.16	7.20	0.01	6.56	0.15
	9	10.17	0.25	5.04	0.01	4.50	0.01	5.40	0.02	7.38	0.06	5.49	0.13	4.05	0.03	6.03	0.10	6.12	0.09	8.10	0.06	7.38	0.10
Right Bank		11.30	0.00	5.60	0.00	5.00	0.00	6.00	0.00	8.20	0.00	6.10	0.00	4.50	0.00	6.70	0.00	6.80	0.00	9.00	0.00	8.20	0.00
Feature Type		Run		Riffle		Riffle		Run		Riffle		Run											

TWC

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Surveyor's Signature: _____ Date: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 1 of 3)
(must be completed for each site)

Date & Time: 5/1/08 09:30	Location Description (e.g., road crossing): Springer Hill Rd. crossing
Stream Name: Dry Fork Creek	
Current Weather Conditions: partly cloudy	Facility Name(s): Clarksburg WWTF
Weather Conditions for Past 10 days: 1.07" precipitation	Permit Number(s): MO 0109797
Official Drought Conditions at time of this survey (search DNR home page for "drought"): 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 Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 0530423	Northing (UTM Y): 4275041	Horizontal Accuracy: (EPE / FOM / PDOP) 26 feet
Site 11	Easting (UTM X): 0530550	Northing (UTM Y): 4275165	Horizontal Accuracy: (EPE / FOM / PDOP) 20 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
3023	upstream	3024	downstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

Uses Observed*: (Uses actually observed at the 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 <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

Site # 03

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 2 of 3)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: Private property Pasture				

Evidence of Human Use*: (Attach photos and reference in "Photos" section.)

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
<input type="checkbox"/> None of the above	Comments / Other:			

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

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

Benthic algae

Water Characteristics*: (Mark all that apply.)

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

*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 affect another use.

Site # 03

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Printed Names of Personnel Collecting Data: Renee Martin and Jennifer Hrabik

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u> Dry Fork Creek </u> Waterbody ID: <u> 0953 </u> Site #: <u> 0953_03 </u> Estimated Channel Incision: <u> 0.10 </u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u> 530423 </u> UTM Y: <u> 4275041 </u> +/- <u> 26 </u> (feet) 11 UTM X: <u> 530550 </u> UTM Y: <u> 4275165 </u> +/- <u> 20 </u> (feet) Average Stream Width: <u> 4.7 </u> (meters) Length of Survey Segment: <u> 150 </u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u> Renee Martin/ Jennifer Hrabik </u>	<h4 style="text-align: center; margin: 0;">Dissolved Oxygen</h4> Date: <u> 5/1/2008 </u> Time: <u> 9:30 </u> Dissolved Oxygen: <u> 11.66 </u> (mg/L) Dissolved Oxygen: <u> 117.5 </u> (% sat) Specific Cond: <u> 364.0 </u> (µS/cm) Water Temperature: <u> 15.8 </u> (°C)
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	0.37	0.01	0.32	0.09	0.69	0.05	0.31	0.13	0.45	0.05	0.43	0.10	0.50	0.20	0.57	0.04	0.31	0.01	0.43	0.07	0.74	0.13
	2	0.74	0.02	0.64	0.17	1.38	0.07	0.62	0.13	0.90	0.10	0.86	0.24	1.00	0.20	1.14	0.06	0.62	0.01	0.86	0.12	1.48	0.01
	3	1.11	0.04	0.96	0.26	2.07	0.07	0.93	0.16	1.35	0.13	1.29	0.27	1.50	0.20	1.71	0.03	0.93	0.04	1.29	0.16	2.22	0.00
	4	1.48	0.04	1.28	0.27	2.76	0.06	1.24	0.16	1.80	0.17	1.72	0.27	2.00	0.20	2.28	0.07	1.24	0.06	1.72	0.15	2.96	0.00
	5	1.85	0.07	1.60	0.27	3.45	0.06	1.55	0.14	2.25	0.18	2.15	0.20	2.50	0.17	2.85	0.04	1.55	0.09	2.15	0.16	3.70	0.01
	6	2.22	0.15	1.92	0.30	4.14	0.01	1.86	0.14	2.70	0.13	2.58	0.15	3.00	0.07	3.42	0.01	1.86	0.10	2.58	0.24	4.44	0.17
	7	2.59	0.15	2.24	0.40	4.83	0.01	2.17	0.08	3.15	0.08	3.01	0.08	3.50	0.07	3.99	0.03	2.17	0.16	3.01	0.26	5.18	0.40
	8	2.96	0.10	2.56	0.48	5.52	0.02	2.48	0.08	3.60	0.06	3.44	0.01	4.00	0.04	4.56	0.04	2.48	0.20	3.44	0.13	5.92	0.44
	9	3.33	0.01	2.88	0.50	6.21	0.01	2.79	0.01	4.05	0.01	3.87	0.01	4.50	0.01	5.13	0.01	2.79	0.23	3.87	0.10	6.66	0.34
Right Bank		3.70	0.00	3.20	0.00	6.90	0.00	3.10	0.00	4.50	0.00	4.30	0.00	5.00	0.00	5.70	0.00	3.10	0.00	4.30	0.00	7.40	0.00
Feature Type <small>(riffle, run, or pool)</small>		Riffle		Pool		Run		Riffle		Run		Run		Riffle		Run		Run		Pool			

TWC

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Surveyor's Signature: _____ Date: _____



AES
WBID # 0953
SITE # 1
UPSTREAM

AES

WBID # 0953

SITE # 1

DRYSTREAM





AES

WBID # 0953

SITE # 2

UPSTREAM



AES

WBID # 0953
SITE # 2
DNSTREAM



AES

WBID # 0953

SITE # 3

UPSTREAM

AES

WBID[#] 0953

SITE[#] 3

DNSTREAM

