

Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0791 Tributary to Clark Fork

Submitted by

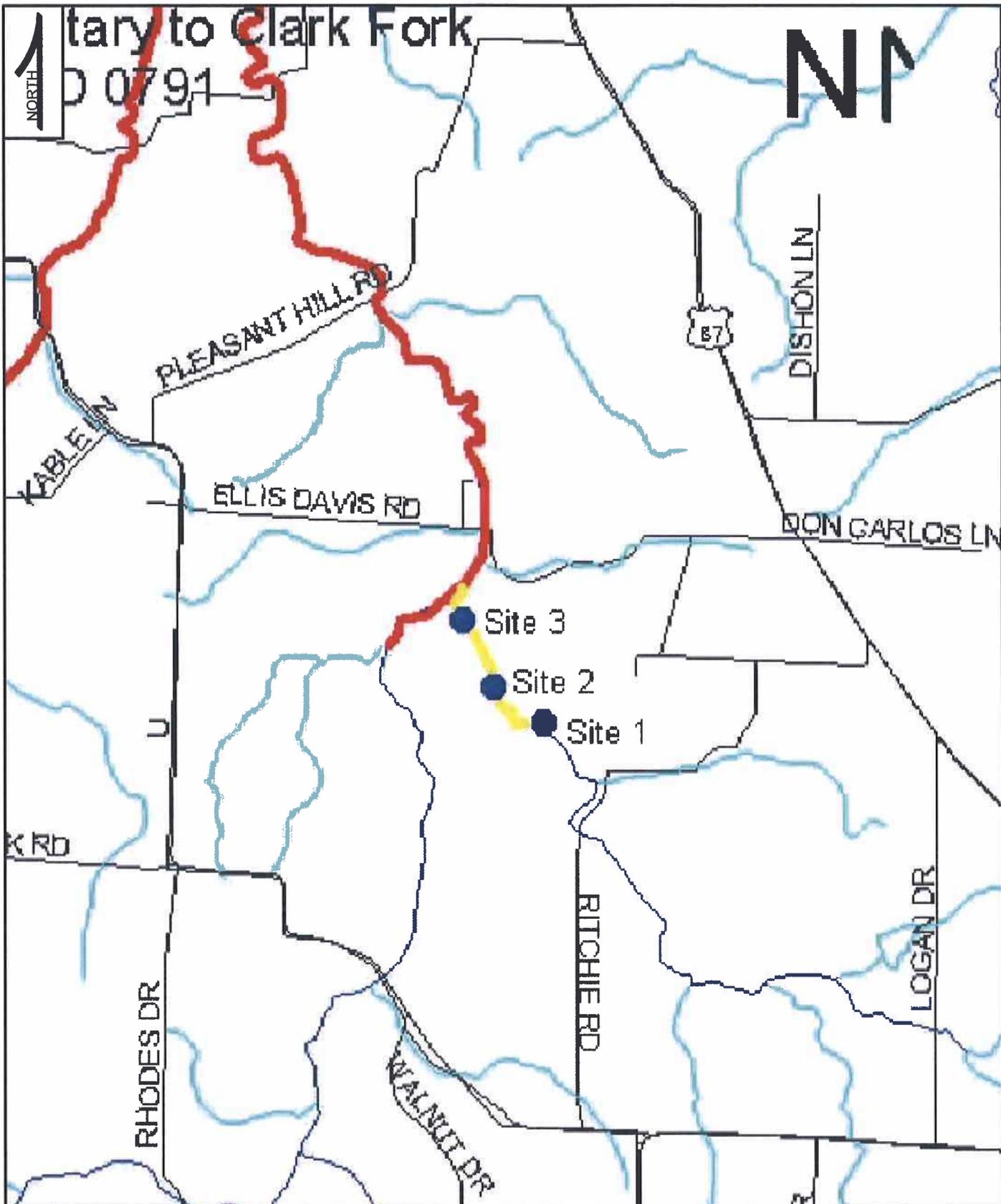
Pickett Ray & Silver, Inc.

to

Missouri Department of Natural Resources
Water Protection Program

Date received: October 31, 2007

\\3serverprj\Projects\07031\dwg\07031_MODN_01E\0791 Tributary to Clark Fk.dwg, 10/26/2007 7:47:30 AM, BLSTOESZ



PICKETT RAY & SILVER

Civil Engineers Land Surveyors Natural Resources
Address: 333 Mid Rivers Mall Drive St. Peters, Missouri 63376
Phone: (636)397-1211 Fax: (636)397-1104 Website: www.prs3.com

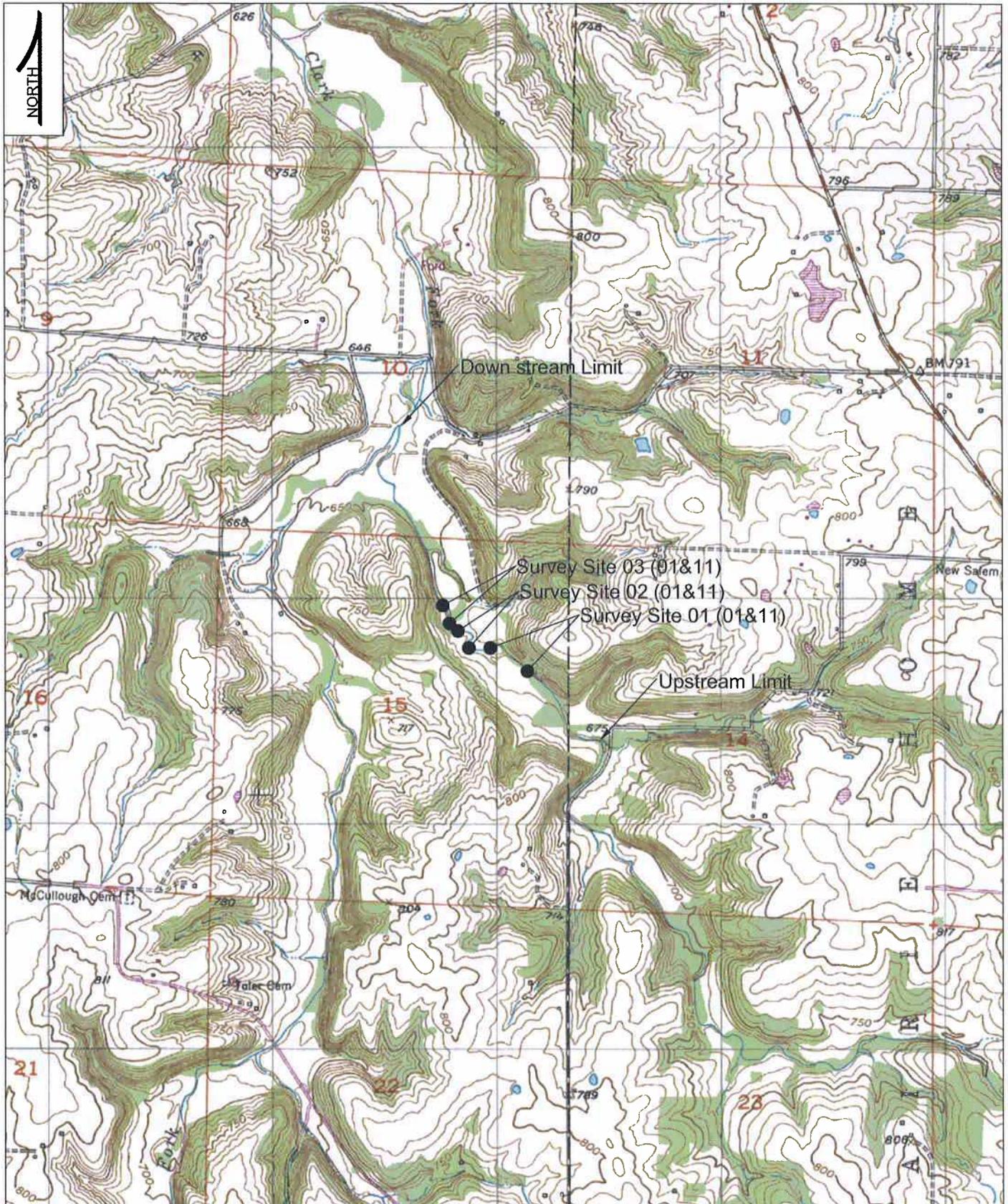
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WBID #: 0791
Name: Tributary to Clark Fk Creek
County: Cooper
GIS Location Map
Sheet 1 of 1

Map provided by AES.
Please refer to USGS for exact site location indicators.

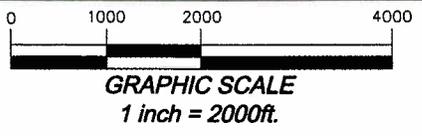
PRS Job Number: 07031.MODN.01E
Drawn By: BLS Date: 10-12-07
Checked By: JCV Date: 10-12-07

\\3serverpr\Projects\07031\dwg\07031_MODN_01E\0791 Tributary to Clark Fk.dwg, 10/12/2007 2:24:16 PM, BLSTOESZ



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 Civil Engineers Land Surveyors Natural Resources
 Address: 333 Mid Rivers Mall Drive Phone: (636)397-1211
 St. Peters, Missouri 63376 Fax: (636)397-1104
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WBID #: 0791
 Name: Tributary to Clark Fk.
 County: Cooper
 USGS Location Map



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Sheet 1 of 1

PRS Job Number: 07031.MODN.01E
 Drawn By: BLS Date: 10-12-07
 Checked By: JCV Date: 10-12-07



Missouri
 Department of Natural Resources
Nonpoint 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): Trib. of Clark Fork	
Missouri Water Body Identification (WBID) Number: 0791	
8-digit HUC: 20090401	County: Cooper
Upstream Legal Description (from Table H): 15, 47N, 16W	
Downstream Legal Description (from Table H): Mouth	
Number of sites evaluated: 3	
List all sites numbers, listed consequently upstream to downstream: 0791_01 400m from Ritchie Rd, 0791_02 100m downstream of site 01, 0791_03 100m downstream of site 02	

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

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

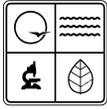
Facility Name(s) and Permit Number(s): Prairie Home WWTF – MO 0022837

III. UAA Surveyor (please print legibly)

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

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

Signed: _____ **Date:** _____



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: 9/8/07 15:05	Site Location Description (e.g., road crossing): Walk in 400m from Ritchie Rd
Personnel (Data Collectors): Tiffanie Hamilton, Justyn Foth	
Current Weather Conditions: cloudy	Facility Name: Prairie Home WWTF
Weather Conditions for Past 10 days: clear/rain	Permit Number: MO 0022837
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 Location:

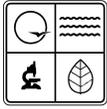
LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4298915	Northing (UTM Y): 0530119	Horizontal Accuracy: (EPE / FOM / PDOP) 32 feet
Site 11	Easting (UTM X): 4298943	Northing (UTM Y): 0529953	Horizontal Accuracy: (EPE / FOM / PDOP) 20 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
791_1_01	Upstream, transect 1	791_1_2	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 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.)				



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization (continued)

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:				

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
Comments / Other:				

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

90% Cobble	10% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock
------------	------------	--------	--------	------------	-----------

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

none

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: N/A (dry)
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*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.



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization (continued)

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.)

Dry, livestock watering use

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

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

<div style="display: inline-block; vertical-align: top;"> <p>Missouri Department of Natural Resources</p> <p>Waterbody ID: <u>701</u></p> <p>Site #: <u>1</u></p> <p>Estimated Channel Incision: <u>0.5</u> (m) (height between low bank width and water)</p> <p>GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)</p> <p>01 UTM X: <u>4298915</u> UTM Y: <u>0530119</u> +/- <u>32</u> (feet)</p> <p>11 UTM X: <u>4298943</u> UTM Y: <u>0529953</u> +/- <u>20</u> (feet)</p> <p>Average Stream Width: <u>2.3</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width)</p> <p>Field Staff: <u>Tiffanie Hamilton and Justyn Foth</u></p> </div>	<p>Dissolved Oxygen</p> <p>Date: <u>9/8/2007</u> Time: <u>15:05</u></p> <p>Dissolved Oxygen: <u>---</u> (mg/L)</p> <p>Dissolved Oxygen: <u>---</u> (% sat)</p> <p>Specific Cond: <u>---</u> (µS/cm)</p> <p>Water Temperature: <u>---</u> (°C)</p> <p style="text-align: center;">DRY</p>
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		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	0.21	0.00	0.36	0.00	0.12	0.00	0.41	0.00	0.10	0.00	0.08	0.00	0.25	0.00	0.29	0.00	0.18	0.00	0.33	0.00	0.39	0.00
	2	0.42	0.00	0.72	0.00	0.24	0.00	0.82	0.00	0.20	0.00	0.16	0.00	0.50	0.00	0.58	0.00	0.36	0.00	0.66	0.00	0.78	0.00
	3	0.63	0.00	1.08	0.00	0.36	0.00	1.23	0.00	0.30	0.00	0.24	0.00	0.75	0.00	0.87	0.00	0.54	0.00	0.99	0.00	1.17	0.00
	4	0.84	0.00	1.44	0.00	0.48	0.00	1.64	0.00	0.40	0.00	0.32	0.00	1.00	0.00	1.16	0.00	0.72	0.00	1.32	0.00	1.56	0.00
	5	1.05	0.00	1.80	0.00	0.60	0.00	2.05	0.00	0.50	0.00	0.40	0.00	1.25	0.00	1.45	0.00	0.90	0.00	1.65	0.00	1.95	0.00
	6	1.26	0.00	2.16	0.00	0.72	0.00	2.46	0.00	0.60	0.00	0.48	0.00	1.50	0.00	1.74	0.00	1.08	0.00	1.98	0.00	2.34	0.00
	7	1.47	0.00	2.52	0.00	0.84	0.00	2.87	0.00	0.70	0.00	0.56	0.00	1.75	0.00	2.03	0.00	1.26	0.00	2.31	0.00	2.73	0.00
	8	1.68	0.00	2.88	0.00	0.96	0.00	3.28	0.00	0.80	0.00	0.64	0.00	2.00	0.00	2.32	0.00	1.44	0.00	2.64	0.00	3.12	0.00
	9	1.89	0.00	3.24	0.00	1.08	0.00	3.69	0.00	0.90	0.00	0.72	0.00	2.25	0.00	2.61	0.00	1.62	0.00	2.97	0.00	3.51	0.00
Right Bank		2.10	0.00	3.60	0.00	1.25	0.00	4.16	0.00	1.03	0.00	0.87	0.00	2.54	0.00	2.92	0.00	1.81	0.00	3.31	0.00	3.97	0.00
Feature Type (riffle, run, or pool)		Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry		Dry	

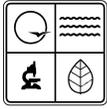
Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

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 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Signed: _____ Date: _____



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: 9/8/07 15:25	Site Location Description (e.g., road crossing): 100m downstream of site 1, transect 11
Personnel (Data Collectors): Tiffanie Hamilton, Justyn Foth	
Current Weather Conditions: cloudy	Facility Name: Prairie Home WWTF
Weather Conditions for Past 10 days: clear/rain	Permit Number: MO 0022837
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 Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4298985	Northing (UTM Y): 0529888	Horizontal Accuracy: (EPE / FOM / PDOP) 22 feet
Site 11	Easting (UTM X): 4299086	Northing (UTM Y): 0529778	Horizontal Accuracy: (EPE / FOM / PDOP) 14 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
791_2_3	upstream	791_2_4	Upstream transect 1		

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 <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization (continued)

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 type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

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 type="checkbox"/> Livestock Watering
Comments / Other: none				

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

90% Cobble	10% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock
------------	------------	--------	--------	------------	-----------

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

none

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 checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
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 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 effect another use.



Missouri Department of Natural Resources
Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B – Site Characterization (continued)

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.

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

 <p> Missouri Department of Natural Resources Site #: <u>2</u> Estimated Channel Incision: <u>1.5</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>4298985</u> UTM Y: <u>0529888</u> +/- <u>22</u> (feet) 11 UTM X: <u>4299086</u> UTM Y: <u>0529778</u> +/- <u>14</u> (feet) Average Stream Width: <u>2.0</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>Tiffanie Hamilton and Justyn Foth</u> </p>	<p style="text-align: center;">Dissolved Oxygen</p> Date: <u>9/8/2007</u> Time: <u>15:25</u> Dissolved Oxygen: <u>2.25</u> (mg/L) Dissolved Oxygen: <u>26.8</u> (% sat) Specific Cond: <u>421.6</u> (µS/cm) Water Temperature: <u>25.0</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		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		0.36	0.05	0.30	0.00	0.20	0.00	0.19	0.02	0.10	0.00	0.11	0.01	0.30	0.00	0.20	0.00	0.40	0.00	0.10	0.00	0.11	0.00
2		0.72	0.16	0.60	0.00	0.40	0.00	0.38	0.00	0.20	0.00	0.22	0.09	0.60	0.00	0.40	0.00	0.80	0.00	0.20	0.00	0.22	0.00
3		1.08	0.24	0.90	0.00	0.60	0.00	0.57	0.02	0.30	0.00	0.33	0.11	0.90	0.00	0.60	0.00	1.20	0.00	0.30	0.00	0.33	0.00
4		1.44	0.25	1.20	0.00	0.80	0.00	0.76	0.05	0.40	0.00	0.44	0.10	1.20	0.00	0.80	0.00	1.60	0.00	0.40	0.00	0.44	0.00
5		1.80	0.54	1.50	0.00	1.00	0.00	0.95	0.06	0.50	0.00	0.55	0.11	1.50	0.00	1.00	0.00	2.00	0.00	0.50	0.00	0.55	0.00
6		2.16	0.38	1.80	0.00	1.20	0.00	1.14	0.04	0.60	0.00	0.66	0.10	1.80	0.00	1.20	0.00	2.40	0.00	0.60	0.00	0.66	0.00
7		2.52	0.20	2.10	0.00	1.40	0.00	1.33	0.03	0.70	0.00	0.77	0.06	2.10	0.00	1.40	0.00	2.80	0.00	0.70	0.00	0.77	0.00
8		2.88	0.10	2.40	0.00	1.60	0.00	1.52	0.01	0.80	0.00	0.88	0.03	2.40	0.00	1.60	0.00	3.20	0.00	0.80	0.00	0.88	0.00
9		3.24	0.03	2.70	0.00	1.80	0.00	1.71	0.02	0.90	0.00	0.99	0.02	2.70	0.00	1.80	0.00	3.60	0.00	0.90	0.00	0.99	0.00
Right Bank		3.62	0.00	3.00	0.00	2.00	0.00	1.92	0.00	1.04	0.00	1.14	0.00	3.00	0.00	2.01	0.00	4.06	0.00	1.00	0.00	1.10	0.00
Feature Type	(rifle, run, or pool)	Pool		Dry		Dry		Pool		Dry		Pool		Dry									

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 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Signed: _____ Date: _____



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: 9/8/07 15:41	Site Location Description (e.g., road crossing): 100m downstream of site 2, transect 11
Personnel (Data Collectors): Tiffanie Hamilton, Justyn Foth	
Current Weather Conditions: cloudy	Facility Name: Prairie Home WWTF
Weather Conditions for Past 10 days: clear/rain	Permit Number: MO 0022837
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 Location:

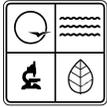
LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4299079	Northing (UTM Y): 0529775	Horizontal Accuracy: (EPE / FOM / PDOP) 23 feet
Site 11	Easting (UTM X): 4299169	Northing (UTM Y): 0529725	Horizontal Accuracy: (EPE / FOM / PDOP) 29 feet

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
791_3_5	upstream transect 1	791_3_6	downstream transect 1		
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 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.)				



Missouri Field Data Sheets for Recreational Use Stream Surveys
Department of Natural Resources
Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments:				

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 type="checkbox"/> Livestock Watering
Comments / Other: none				

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

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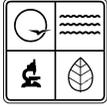
Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Duckweed in small pool

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: black
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*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.



Missouri Department of Natural Resources
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Data Sheet B – Site Characterization (continued)

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.)

Dead decaying buck deer in small pool, dry stream except 2 or 3 small pools.

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

Surveyor's Signature: _____ Date of Survey: _____

Organization: _____ Position: _____

WBID# 0791 Tributary to Clark Fork



Site# 1 Photo ID# 01, T1, Upstream



Site# 1 Photo ID# 2, Downstream



Site# 2 Photo ID# 3, Upstream

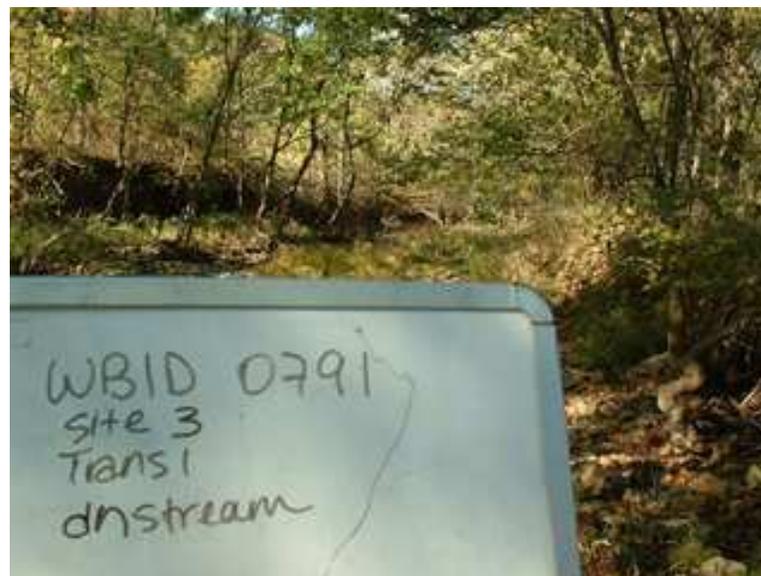


Site# 2 Photo ID# 4, Downstream, T1

WBID# 0791 Tributary to Clark Fork



Site# 3 Photo ID# 5, T1, Upstream



Site# 3 Photo ID# 6, T1, Downstream