



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0313 Prairie Creek

Submitted by
SES, Inc.

To
Missouri Department of Natural Resources
Water Protection Program

On
May 28, 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): Prairie Creek
Missouri Water Body Identification (WBID) Number: 313
8-digit HUC: 102400012
County(ies), Listed Upstream to Downstream: Platte
Upstream Legal Description (from Table H): 52N 35W 12
Downstream Legal Description (from Table H): 52N 35W 23
Number of sites evaluated: 3
List all site numbers, <u>consecutively upstream to downstream</u> : 1, 2, 3
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)

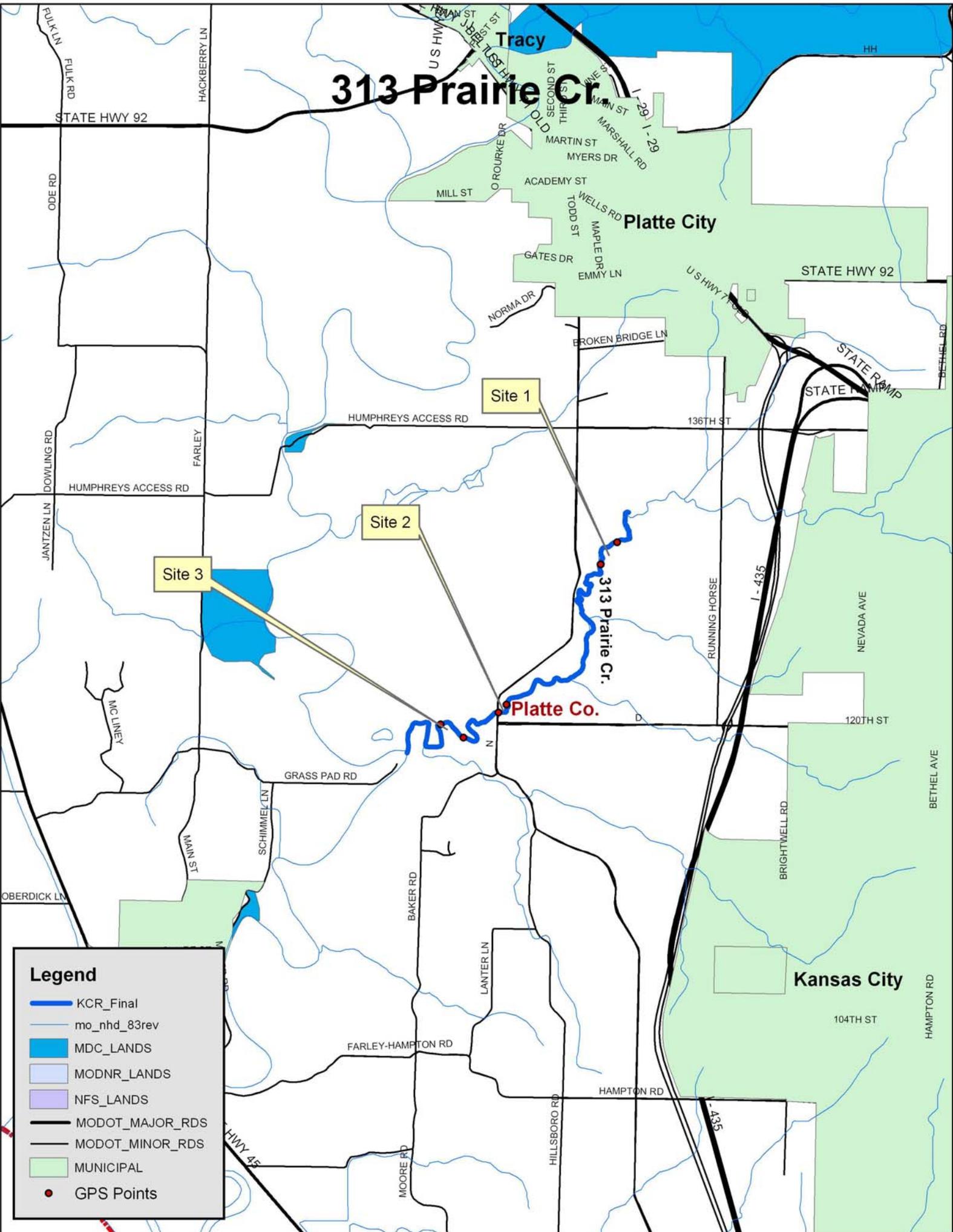
Facility Name(s) and Permit Number(s): PCRSD, Misty Springs WWTP MO0122441

III. UAA Surveyor (please PRINT legibly)

Name of Surveyor: Aaron Ball	Telephone Number: 913.307.0046 Ext.14
Organization/Employer: SES, Inc	

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: Aaron Ball **Date:** 4.18.08



313 Prairie Cr.

Site 1

Site 2

Site 3

313 Prairie Cr.

Platte Co.

Kansas City

Legend

- KCR_Final
- mo_nhd_83rev
- MDC_LANDS
- MODNR_LANDS
- NFS_LANDS
- MODOT_MAJOR_RDS
- MODOT_MINOR_RDS
- MUNICIPAL
- GPS Points

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: 4.14.08 10:35	Location Description (e.g., road crossing):
Stream Name: Prairie Creek	Platte County Park, Prairie Creek Greenway, South Trailhead
Current Weather Conditions: clear	Facility Name(s): PCSRD, Misty Springs WWTP
Weather Conditions for Past 10 days: 1.36 inches	Permit Number(s): MO0122441
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): 0347088	Northing (UTM Y): 0347088	Horizontal Accuracy: (EPE / FOM / PDOP) 2.0 Meters
Site 11	Easting (UTM X): 0346915	Northing (UTM Y): 4354462	Horizontal Accuracy: (EPE / FOM / PDOP) 3.0 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
5	upstream at T11	6	downstream at T1		
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.)				

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 checked="" 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 checked="" 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 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
<input checked="" type="checkbox"/> None of the above	Comments / Other:			

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

30% Cobble	30% Gravel	30% Sand	10% Silt	% Mud/Clay	% Bedrock
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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 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 affect another use.

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.)

none

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

Printed Names of Personnel Collecting Data: Gilisa Gould and Aaron Ball

Surveyor's Signature: Aaron Ball Date of Survey: 4.14.08

Organization: SES, Inc. Position: field team leader

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u>Prairie Creek</u> Waterbody ID: <u>313</u> Site #: <u>1</u> Estimated Channel Incision: <u>2.7</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>0347088</u> UTM Y: <u>4354698</u> +/- <u>2</u> (meters) 11 UTM X: <u>0346915</u> UTM Y: _____ +/- <u>3</u> (meters) Average Stream Width: <u>4</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>Gilisa Gould</u> and <u>Aaron Ball</u>	<h4 style="text-align: center; margin: 0;">Dissolved Oxygen</h4> Date: <u>4.14.08</u> Time: <u>10:35</u> Dissolved Oxygen: <u>17.8</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>7.6</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	0.30	0.10	0.40	0.10	0.20	0.05	0.20	0.10	0.40	0.05	0.40	0.25	0.60	0.35	0.50	0.20	0.40	0.10	0.70	0.30	0.70	0.55
	2	0.60	0.15	0.80	0.20	0.40	0.10	0.40	0.10	0.80	0.10	0.80	0.30	1.20	0.60	1.00	0.30	0.80	0.20	1.40	0.40	1.40	0.60
	3	0.90	0.15	1.20	0.30	0.60	0.10	0.60	0.10	1.20	0.10	1.20	0.30	1.80	0.90	1.50	0.30	1.20	0.30	2.10	0.35	2.10	0.65
	4	1.20	0.15	1.60	0.40	0.80	0.15	0.80	0.10	1.60	0.20	1.60	0.35	2.40	1.00	2.00	0.40	1.60	0.40	2.80	0.40	2.80	0.65
	5	1.50	0.20	2.00	0.50	1.00	0.20	1.00	0.15	2.00	0.25	2.00	0.30	3.00	1.00	2.50	0.40	2.00	0.60	3.50	0.40	3.50	0.80
	6	1.80	0.15	2.40	0.50	1.20	0.20	1.20	0.15	2.40	0.30	2.40	0.25	3.60	0.90	3.00	0.40	2.40	0.60	4.20	0.40	4.20	0.90
	7	2.10	0.10	2.80	0.55	1.40	0.15	1.40	0.20	2.80	0.30	2.80	0.20	4.20	0.80	3.50	0.40	2.80	0.60	4.90	0.45	4.90	0.70
	8	2.40	0.15	3.20	0.50	1.60	0.20	1.60	0.10	3.20	0.30	3.20	0.30	4.80	0.60	4.00	0.30	3.20	0.40	5.60	0.40	5.60	0.55
	9	2.70	0.15	3.60	0.30	1.80	0.25	1.80	0.15	3.60	0.20	3.60	0.30	5.40	0.40	4.50	0.20	3.60	0.30	6.30	0.40	6.30	0.35
Right Bank		3.00	0.15	4.00	0.10	2.00	0.20	2.00	0.20	4.00	0.20	4.00	0.30	6.00	0.10	5.00	0.15	4.00	0.20	7.00	0.30	7.00	0.20
Feature Type <small>(riffle, run, or pool)</small>		riffle		pool		riffle		riffle		pool		riffle		pool		pool		pool		run		pool	

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: Aaron Ball Date: 4.18.08

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: 04.14.08 11:35	Location Description (e.g., road crossing):
Stream Name: Prairie Creek	Highway N
Current Weather Conditions: clear	Facility Name(s): PCRSD, Misty Springs WWTP
Weather Conditions for Past 10 days: 1.36 inches	Permit Number(s): MO0122441
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): 0345815	Northing (UTM Y): 4352863	Horizontal Accuracy: (EPE / FOM / PDOP) 1.5 Meters
Site 11	Easting (UTM X): 0345899	Northing (UTM Y): 4352949	Horizontal Accuracy: (EPE / FOM / PDOP) 4.5 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
3	upstream, T11	4	downstream, T1		
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 # 2

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

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
<input checked="" type="checkbox"/> None of the above	Comments / Other:			

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

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

none in water. grasses, trees, horsetail 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 checked="" type="checkbox"/> Clear	<input checked="" 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 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 affect another use.

Site # 2

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.)

none

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

Printed Names of Personnel Collecting Data: _____ Aaron Ball and Gilisa Gould _____

Surveyor's Signature: _____ Aaron Ball _____ Date of Survey: _____ 04.14.08 _____

Organization: _____ SES, Inc. _____ Position: _____ Field Team Leader _____

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u>Prairie Creek</u> Waterbody ID: <u>313</u> Site #: <u>2</u> Estimated Channel Incision: <u>3.5</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>0345815</u> UTM Y: <u>4352863</u> +/- <u>1.5</u> (meters) 11 UTM X: <u>0345899</u> UTM Y: <u>4352949</u> +/- <u>4.5</u> (meters) Average Stream Width: <u>4</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>Gilisa Gould and Aaron Ball</u>	Dissolved Oxygen Date: <u>04.14.08</u> Time: <u>11:35</u> Dissolved Oxygen: <u>15.6</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>7.9</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		0.50	0.25	0.40	0.30	0.50	0.20	0.50	0.50	0.40	0.30	0.40	0.05	0.40	0.20	0.30	0.25	0.30	0.05	0.50	0.10	0.50	0.05
2		1.00	0.25	0.80	0.35	1.00	0.30	1.00	0.50	0.80	0.50	0.80	0.10	0.80	0.40	0.60	0.40	0.60	0.10	1.00	0.10	1.00	0.10
3		1.50	0.35	1.20	0.30	1.50	0.20	1.50	0.80	1.20	0.45	1.20	0.10	1.20	0.30	0.90	0.40	0.90	0.25	1.50	0.15	1.50	0.05
4		2.00	0.40	1.60	0.25	2.00	0.30	2.00	1.00	1.60	0.40	1.60	0.05	1.60	0.25	1.20	0.30	1.20	0.40	2.00	0.15	2.00	0.05
5		2.50	0.40	2.00	0.20	2.50	0.35	2.50	1.00	2.00	0.40	2.00	0.01	2.00	0.25	1.50	0.30	1.50	0.40	2.50	0.15	2.50	0.15
6		3.00	0.35	2.40	0.20	3.00	0.40	3.00	1.00	2.40	0.45	2.40	0.10	2.40	0.20	1.80	0.30	1.80	0.40	3.00	0.10	3.00	0.10
7		3.50	0.35	2.80	0.30	3.50	0.40	3.50	0.80	2.80	0.50	2.80	0.20	2.80	0.20	2.10	0.25	2.10	0.30	3.50	0.10	3.50	0.15
8		4.00	0.30	3.20	0.30	4.00	0.40	4.00	0.60	3.20	0.45	3.20	0.25	3.20	0.15	2.40	0.25	2.40	0.15	4.00	0.10	4.00	0.30
9		4.50	0.25	3.60	0.20	4.50	0.30	4.50	0.40	3.60	0.30	3.60	0.30	3.60	0.10	2.70	0.20	2.70	0.10	4.50	0.15	4.50	0.30
Right Bank		5.00	0.20	4.00	0.10	5.00	0.30	5.00	0.30	4.00	0.15	4.00	0.30	4.00	0.10	3.00	0.10	3.00	0.10	5.00	0.10	5.00	0.15
Feature Type <small>(riffle, run, or pool)</small>		pool		run		pool		pool		pool		run		riffle									

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: Aaron Ball Date: 04.18.08

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: 04.14.08 9:20	Location Description (e.g., road crossing): West of Highway N, along Cable Bridge Road
Stream Name: Prairie Creek	
Current Weather Conditions: clear	Facility Name(s): PCRSD, Misty Springs WWTP
Weather Conditions for Past 10 days: 1.36 inches	Permit Number(s): MO0122441
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): 0345190	Northing (UTM Y): 4352733	Horizontal Accuracy: (EPE / FOM / PDOP) 6 Meters
Site 11	Easting (UTM X): 0345437	Northing (UTM Y): 4352593	Horizontal Accuracy: (EPE / FOM / PDOP) 7 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1	upstream, T11	2	downstream, T1		
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 # 3

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

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
<input checked="" type="checkbox"/> None of the above	Comments / Other:			

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

10% Cobble	30% Gravel	30% Sand	30% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

none in water. grasses, horsetail on banks.
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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: brown, silty
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 affect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Stream Name: <u>Prairie Creek</u> Waterbody ID: <u>313</u> Site #: <u>3</u> Estimated Channel Incision: <u>4</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>0345190</u> UTM Y: <u>4352733</u> +/- <u>17</u> (meters) 11 UTM X: <u>0345437</u> UTM Y: <u>4352593</u> +/- <u>19</u> (meters) Average Stream Width: <u>4</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>Gilisa Gould</u> and <u>Aaron Ball</u>	<h4 style="text-align: center; margin: 0;">Dissolved Oxygen</h4> Date: <u>4.14.08</u> Time: <u>9:20</u> Dissolved Oxygen: <u>15.8</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>8.2</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	0.50	0.05	0.30	0.10	0.40	0.30	0.30	0.20	0.50	0.00	0.30	0.15	0.40	0.20	0.30	0.10	0.30	0.15	0.30	0.10	0.40	0.10
	2	1.00	0.10	0.60	0.25	0.80	0.40	0.60	0.20	1.00	0.00	0.60	0.20	0.80	0.20	0.60	0.15	0.60	0.15	0.60	0.20	0.80	0.20
	3	1.50	0.15	0.90	0.50	1.20	0.45	0.90	0.30	1.50	0.00	0.90	0.25	1.20	0.15	0.90	0.15	0.90	0.25	0.90	0.15	1.20	0.50
	4	2.00	0.10	1.20	0.50	1.60	0.30	1.20	0.35	2.00	0.00	1.20	0.20	1.60	0.15	1.20	0.15	1.20	0.20	1.20	0.10	1.60	0.50
	5	2.50	0.10	1.50	0.60	2.00	0.45	1.50	0.30	2.50	0.00	1.50	0.20	2.00	0.10	1.50	0.15	1.50	0.20	1.50	0.10	2.00	0.30
	6	3.00	0.15	1.80	0.70	2.40	0.10	1.80	0.20	3.00	0.10	1.80	0.20	2.40	0.15	1.80	0.20	1.80	0.20	1.80	0.15	2.40	0.35
	7	3.50	0.10	2.10	0.65	2.80	0.15	2.10	0.10	3.50	0.20	2.10	0.25	2.80	0.10	2.10	0.30	2.10	0.15	2.10	0.30	2.80	0.40
	8	4.00	0.10	2.40	0.50	3.20	0.20	2.40	0.20	4.00	0.30	2.40	0.20	3.20	0.15	2.40	0.30	2.40	0.10	2.40	0.35	3.20	0.35
	9	4.50	0.10	2.70	0.30	3.60	0.20	2.70	0.15	4.50	0.25	2.70	0.20	3.60	0.20	2.70	0.25	2.70	0.10	2.70	0.30	3.60	0.20
Right Bank		5.00	0.05	3.00	0.15	4.00	0.25	3.00	0.15	5.00	0.15	3.00	0.10	4.00	0.10	3.00	0.40	3.00	0.05	3.00	0.30	4.00	0.20
Feature Type		rifle		pool		rifle		run		rifle		run		run		pool		run		pool		pool	

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: Aaron Ball Date: 4.18.08

WBID# 0313 Prairie Creek



Site# 1 Photo ID# 5 Upstream, T11



Site# 2 Photo ID# 6, Downstream, T01



Site# 2 Photo ID# 3, Upstream, T11



Site# 2 Photo ID# 4, Downstream, T01

WBID# 0313 Prairie Creek



Site# 3 Photo ID# 1, Upstream, T11



Site# 3 Photo ID# 2, Downstream, T01