Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1528 Beaver Creek

Submitted by
MEC Water Resources

To
Missouri Department of Natural Resources
Water Protection Program

On
December 1, 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): Beaver Creek	
Missouri Water Body Identification (WBID) Number: 1528	
8-digit HUC: 10290203	County: Phelps
Upstream Legal Description (from Table H): 33, 37N, 8W	
Downstream Legal Description(from Table H): Mouth	
Number of sites evaluated 3	
List all sites numbers, listed consecutively upstream to downstream: #1, 2, 3	

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

Discharger Facility Name(s): Lakewood Court	
Discharger Permit Number(s): MO0086975	

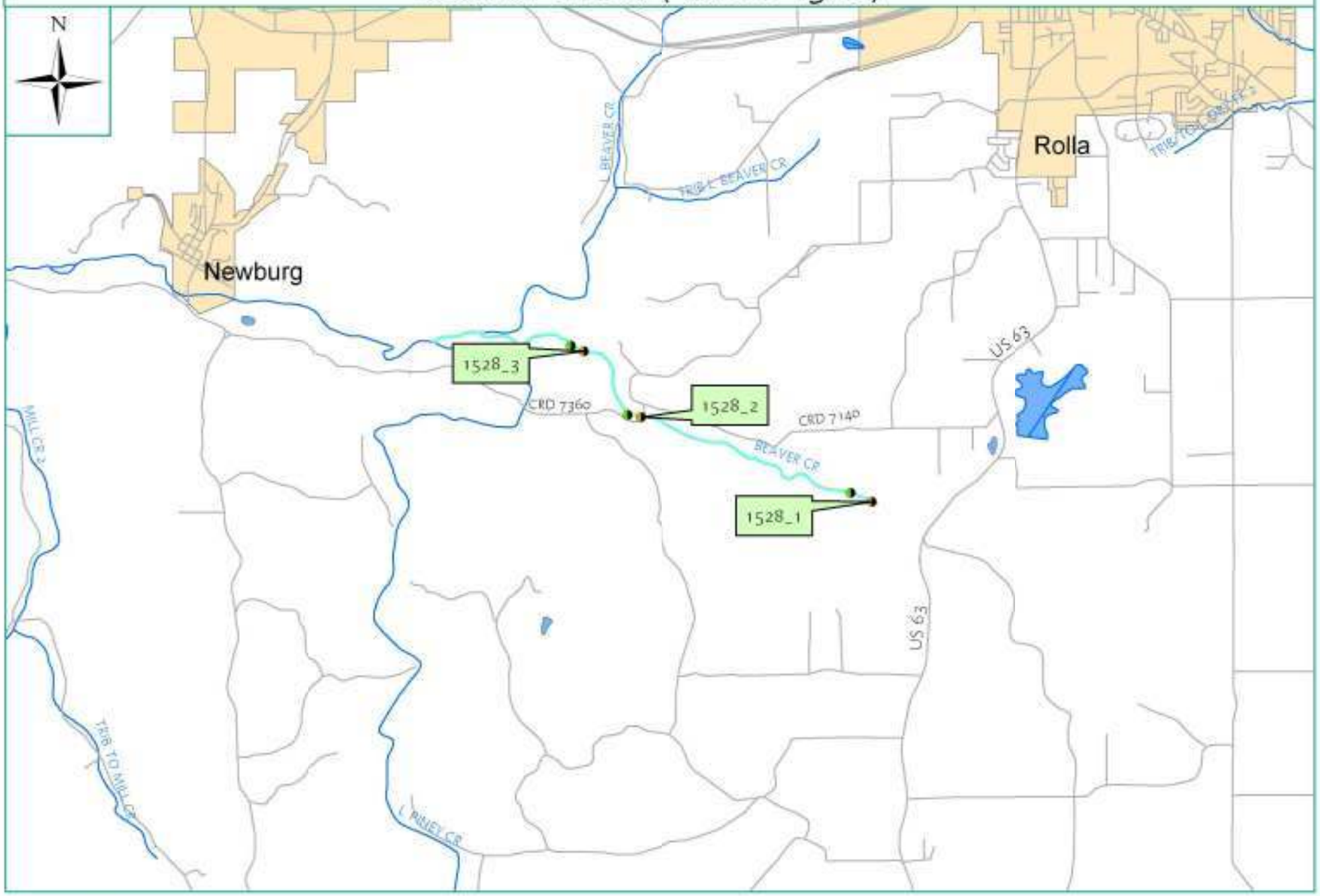
III. UAA Surveyor (please print legibly)

Name of Surveyor	Telephone Number: (573) 443-4100
Organization/Employer: MEC-Water Resources	
Position: Water Quality Scientist	

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

Signed: [signature] for Tim alnother **Date:** 10-15-07

Beaver Creek (WBID 1528)



Upstream Boundary
Downstream Boundary

Miles
0 0.250.5 1 1.5 2

WBID # 1528

Site # 1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: 10/11/07 12:38	Site Location Description (e.g., road crossing): Hwy 63 Bridge
Personnel (Data Collectors): TA, JV	
Current Weather Conditions: Clear, Dry, Cool	Facility Name:
Weather Conditions for Past 10 days: Clear, Dry	Permit Number:
Drought Conditions?: No drought ☑; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4193692	Northing (UTM Y): 15S 0605320	Horizontal Accuracy: (EPE / FOM / PDOP) 7.2 Meters
Site 11	Easting (UTM X): 4193807	Northing (UTM Y): 15S 0605050	Horizontal Accuracy: (EPE / FOM / PDOP) 5.7 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1528-1-1178	US	1528-1-1179	DNS		
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.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ 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.)

None Observed

WBID # 1528
Site # 1

Field Data Sheets for Recreational Use Stream Surveys

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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☑ Rural Residential
☐ Campgrounds	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ Boating accesses	☐ Fence	☐ No trespass sign	☑ Steep slopes	☐ Other: Pasture/Riparian

Comments:

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

☐ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Camping Sites	☐ Rope swings
☐ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Livestock Watering

Comments / Other:

None Observed

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

2.5 % Cobble	2.5 % Gravel	5 % Sand	5 % Silt	85 % Mud/Clay	85 % Bedrock

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

Reeds, Periphyton + Algae abundant, Smartweed, grasses, water cress

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☑ None	☐ Other:
Color:	☑ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☑ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☑ None	☐ 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.

WBID # 1528

Site # 1

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)
		N/A			

Comments: (Please record any additional comments here.)

N/A

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

Surveyor's Signature: [signature] Date of Survey: 10/11/07

Organization: MEC Water Resources Position: Water Quality Scientist

RMC 10-15-07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: 1528 Site #: 1 (wbid_site #)

Estimated Channel Incision: 0.25 (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: 4193692 UTM Y: 155 0605320 +/- 7.2 (meters)

11 UTM X: 4193807 UTM Y: 155 0605050 +/- 5.7 (meters)

Average Stream Width: 15 (meters) (To determne Length of Reach)

Length of Survey Segment: 300 (meters) (20x average stream width)

Field Staff: TA, JV

Dissolved Oxygen

Date: 10/11/07 Time: 12:38

Dissolved Oxygen: 7.57 (mg/L)

Dissolved Oxygen: 76.6 (% sat)

Specific Cond: 407.3 (µS/cm)

Water Temperature: 15.9 (°C)

Transect Cross-Section

Station	01 Distance (m)	01 Depth (m)	02 Distance (m)	02 Depth (m)	03 Distance (m)	03 Depth (m)	04 Distance (m)	04 Depth (m)	05 Distance (m)	05 Depth (m)	06 Distance (m)	06 Depth (m)	07 Distance (m)	07 Depth (m)	08 Distance (m)	08 Depth (m)	09 Distance (m)	09 Depth (m)	10 Distance (m)	10 Depth (m)	11 Distance (m)	11 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	0.95	0.08	1.09	0.06	1.30	0.01	~~0.40~~ 0.82	0.11	1.46	0.02	1.8	0.17	1.94	0.09	2.15	0.14	2.0	0.02	2.07	0.04	2.10	0.06
2	1.9	0.09	2.18	0.07	2.6	0.10	1.84	0.19	2.92	0.02	3.6	0.20	3.88	0.14	4.3	0.16	4.0	0.11	4.14	0.05	4.2	0.0
3	2.85	0.11	3.27	0.07	3.9	0.04	2.76	0.23	4.38	0.04	5.4	0.20	5.82	0.10	6.45	0.09	6.0	0.10	6.21	0.08	6.3	0.06
4	3.8	0.16	4.36	0.05	5.2	0.05	3.68	0.19	5.84	0.0	7.2	0.22	7.76	0.15	8.6	0.16	8.0	0.12	8.28	0.11	8.4	0.01
5	4.75	0.04	5.45	0.18	6.5	0.10	4.6	0.18	7.3	0.06	9.0	0.17	9.7	0.15	10.75	0.18	10.0	0.01	10.35	0.12	10.5	0.02
6	5.7	0.05	6.54	0.12	7.8	0.11	5.52	0.16	8.76	0.14	10.8	0.15	11.64	0.22	12.9	0.19	12.0	0.06	12.42	0.12	12.6	0.0
7	6.65	0.09	7.63	0.18	9.1	0.08	6.44	0.13	10.22	0.21	12.6	0.13	13.58	0.27	15.05	0.21	14.0	0.08	14.49	0.14	14.7	0.02
8	7.6	0.05	8.72	0.10	10.4	0.08	7.36	0.05	11.68	0.09	14.4	0.25	15.52	0.21	17.2	0.20	16.0	0.03	16.56	0.14	16.8	0.07
9	8.55	0.01	9.81	0.15	11.7	0.04	8.28	0.04	13.14	0.07	16.2	0.13	17.46	0.21	19.35	0.10	18.0	0.18	18.63	0.15	18.9	0.08
Right Bank	9.5	0	10.9	0	13.0	0	9.2	0	14.6	0	18.0	0	19.4	0	21.5	0	20.0	0	20.7	0	21.0	0
Feature Type (riffle, run, or pool)	Run		Run		Riffle		Run		Run		Run		Run		Run		Run		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 location 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.

RUC 10-15-07

Signed: [illegible] Date: 10/11/07

WBID # 1528

Site # 2

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: 10/11/07 10:05	Site Location Description (e.g., road crossing): CRD 7360 Bridge
Personnel (Data Collectors): TA	
Current Weather Conditions: Clear, Dry, Cool	Facility Name:
Weather Conditions for Past 10 days: Clear, Dry	Permit Number:
Drought Conditions?: No drought ☑; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4194793	Northing (UTM 15 Y): 0602311	Horizontal Accuracy: (EPE / FOM / PDOP) 4.6 Meters
Site 11	Easting (UTM X): 4194818	Northing (UTM 15 Y): 0602134	Horizontal Accuracy: (EPE / FOM / PDOP) 6.1 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1528-2-1170	US	1528-2-1171	DNS	1528-2-1175	House Access
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.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ 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.)

None Observed

WBID # 1528

Site # 2

Field Data Sheets for Recreational Use Stream Surveys

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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☑ Rural Residential
☐ Campgrounds	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ Boating accesses	☐ Fence	☐ No trespass sign	☑ Steep slopes	☑ Other: Pasture / Riparian

Comments:

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

☐ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Camping Sites	☐ Rope swings
☐ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Livestock Watering

Comments / Other: House access path

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

5 % Cobble	15 % Gravel	70 % Sand	5 % Silt	% Mud/Clay	5 % Bedrock

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

Water cress, Grasses, periphyton + algae common, Smart weed

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☑ None	☐ Other:
Color:	☑ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☑ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☑ None	☐ Other:

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WBID # 1528

Site # 2

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)
		N/A			

Comments: (Please record any additional comments here.)

N/A

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

Surveyor's Signature: [signature] Date of Survey: 10/11/07

Organization: MEC Water Resources Position: Water Quality Scientist

RWC 10-15-07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: 1528 Site #: 2 (wbid_site #)

Estimated Channel Incision: 0.25 (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: 4194793 UTM Y: 155 0602311 +/- 4.6 (meters)

11 UTM X: 4194818 UTM Y: 155 0602134 +/- 6.1 (meters)

Average Stream Width: 10 (meters) (To determne Length of Reach)

Length of Survey Segment: 200 (meters) (20x average stream width)

Field Staff: TA, JV

Dissolved Oxygen

Date: 10/11/07 Time: 10:05

Dissolved Oxygen: 8.15 (mg/L)

Dissolved Oxygen: 78.4 (% sat)

Specific Cond: 363.0 (µS/cm)

Water Temperature: 13.5 (°C)

Transect Cross-Section

Station	01 Distance (m)	01 Depth (m)	02 Distance (m)	02 Depth (m)	03 Distance (m)	03 Depth (m)	04 Distance (m)	04 Depth (m)	05 Distance (m)	05 Depth (m)	06 Distance (m)	06 Depth (m)	07 Distance (m)	07 Depth (m)	08 Distance (m)	08 Depth (m)	09 Distance (m)	09 Depth (m)	10 Distance (m)	10 Depth (m)	11 Distance (m)	11 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	0.31	0.04	0.52	0.13	0.93	0.40	0.80	0.14	1.33	0.44	1.11	0.23	1.10	0.21	0.96	0.08	0.85	0.09	1.0	0.03	1.09	0.22
2	0.62	0.07	1.04	0.10	1.86	0.46	1.6	0.20	2.66	0.57	2.22	0.25	2.2	0.26	1.92	0.0	1.7	0.0	2.0	0.17	2.18	0.38
3	0.93	0.0	1.56	0.12	2.79	0.45	2.4	0.25	3.99	0.45	3.33	0.22	3.3	0.23	2.88	0.0	2.55	0.28	3.0	0.21	3.27	0.32
4	1.24	0.02	2.08	0.13	3.72	0.39	3.2	0.30	5.32	0.38	4.44	0.23	4.4	0.28	3.84	0.0	3.4	0.36	4.0	0.25	4.36	0.27
5	1.55	0.03	2.6	0.13	4.65	0.37	4.0	0.32	6.65	0.30	5.55	0.24	5.5	0.30	4.8	0.03	4.25	0.31	5.0	0.26	5.45	0.32
6	1.86	0.07	3.12	0.06	5.58	0.29	4.8	0.25	7.98	0.21	6.66	0.32	6.6	0.22	5.76	0.05	5.1	0.19	6.0	0.20	6.54	0.33
7	~~2.14~~ 2.17	0.07	3.64	0.08	6.51	0.25	5.6	0.20	9.31	0.11	7.77	0.23	7.7	0.21	6.72	0.13	5.95	0.16	7.0	0.16	7.63	0.35
8	2.48	~~1.0~~ 0.30	4.16	0.05	7.44	0.21	6.4	0.17	10.64	0.11	8.88	0.13	8.8	0.15	7.68	0.13	6.8	0.15	8.0	0.11	8.72	0.24
9	2.79	0.05	4.68	0.05	8.37	0.19	7.2	0.09	11.97	0.08	9.99	0.06	9.9	0.07	8.64	0.05	7.65	0.12	9.0	0.08	9.81	0.20
Right Bank	3.1	0	5.2	0	9.3	0	8.0	0	13.3	0	11.1	0	11.0	0	9.6	0	8.5	0	10.0	0	10.9	0
Feature Type (riffle, run, or pool)	Riffle		Riffle		Run		Run		Run		Run		Run		Riffle		Run		Run		Run	

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.

QAC 10-15-07

Signed: [signature] Date: 10/11/07

WBID # 1528
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 11:00	Site Location Description (e.g., road crossing): Downstream at CRD 7360 Bridge
Personnel (Data Collectors): TA, JV	
Current Weather Conditions: Clear, Dry, Cool	Facility Name:
Weather Conditions for Past 10 days: Clear, Dry	Permit Number:
Drought Conditions?: No drought ☑; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): 4195649	Northing (UTM Y): 15S 0601565	Horizontal Accuracy: (EPE / FOM / PDOP) 7.4 Meters
Site 11	Easting (UTM X): 4195717	Northing (UTM Y): 15S 0601395	Horizontal Accuracy: (EPE / FOM / PDOP) 6.2 Meters

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1528-3-1176	US	1528-3-1177	DNS		
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.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ 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.)

None Observed

WBID # 1528
Site # 3

Field Data Sheets for Recreational Use Stream Surveys

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.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☑ Rural Residential
☐ Campgrounds	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ Boating accesses	☐ Fence	☐ No trespass sign	☑ Steep slopes	☑ Other: Pasture/Riparian

Comments:

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

☐ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Camping Sites	☐ Rope swings
☐ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☑ Livestock Watering

Comments / Other:

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

10 % Cobble	50 % Gravel	~~50~~ 40 % Sand	% Silt	% Mud/Clay	% Bedrock

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

Water Cress, Periphyton & Algae abundant, grasses, short weed

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☑ None	☐ Other:
Color:	☑ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☑ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☑ None	☐ 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.

WBID # 1528

Site # 3

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)
		N/A			

Comments: (Please record any additional comments here.)

N/A

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

Surveyor's Signature: [signature] Date of Survey: 10/11/07

Organization: MEC Water Resources Position: Water Quality Scientist

RWC 10-15-07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: 1528 Site #: 3 (wbid_site #)

Estimated Channel Incision: 0.25 (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: 4195649 UTM Y: 15 5 0601565 +/- 7.4 (meters)

11 UTM X: 4195717 UTM Y: 15 5 0601395 +/- 6.2 (meters)

Average Stream Width: 10 (meters) (To determne Length of Reach)

Length of Survey Segment: 200 (meters) (20x average stream width)

Field Staff: TA, JV

Dissolved Oxygen

Date: 10/11/07 Time: 11:00

Dissolved Oxygen: 9.24 (mg/L)

Dissolved Oxygen: 95.8 (% sat)

Specific Cond: 382.0 (µS/cm)

Water Temperature: 17.1 (°C)

Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	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	1.33	0.06	0.65	0.06	0.80	0.09	0.73	0.15	1.0	0.04	0.82	0.08	1.05	0.09	1.41	0.11	2.0	0.04	1.0	0.02	1.59	0.05
2	2.66	0.03	1.3	0.06	1.6	0.13	1.46	0.21	2.0	0.0	1.64	0.20	2.1	0.08	2.82	0.14	4.0	0.0	2.0	0.04	3.18	0.0
3	3.99	0.05	1.95	0.05	2.4	0.09	2.19	0.24	3.0	0.0	2.46	0.17	3.15	0.11	4.23	0.20	6.0	0.0	3.0	0.06	4.77	0.01
4	5.32	0.05	2.6	0.06	3.2	0.21	2.92	0.22	4.0	0.04	3.28	0.21	4.2	0.12	5.64	0.16	8.0	0.0	4.0	0.06	6.36	0.03
5	6.65	0.06	3.25	0.10	4.0	0.24	3.65	0.18	5.0	0.09	4.1	0.20	5.25	0.08	7.05	0.17	10.0	0.03	5.0	0.08	7.95	0.05
6	7.98	0.05	3.9	0.0	4.8	0.19	4.38	0.20	6.0	0.08	4.92	0.15	6.3	0.12	8.46	0.18	12.0	0.11	6.0	0.09	9.54	0.10
7	9.31	0.06	4.55	0.08	5.6	0.22	5.11	0.18	7.0	0.07	5.74	0.08	7.35	0.11	9.87	0.12	14.0	0.47	7.0	0.06	11.13	0.06
8	10.64	0.10	5.2	0.04	6.4	0.19	5.84	0.18	8.0	0.09	6.56	0.14	8.4	0.09	11.28	0.12	16.0	0.64	8.0	0.05	12.72	0.14
9	11.97	0.08	5.85	0.0	7.2	0.09	6.57	0.07	9.0	0.04	7.38	0.10	9.45	0.05	12.69	0.03	18.0	0.52	9.0	0.03	14.31	0.19
Right Bank	13.3	0	6.5	0	8.0	0	7.3	0	10.0	0	8.2	0	10.5	0	14.1	0	20.0	0	10.0	0	15.9	0
Feature Type (riffle, run, or pool)	Riffle		Riffle		Run		Run		Riffle		Run		Run		Run		Run		Riffle		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 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

RMC 10-15-07

Signed: [signature] Date: 10/11/07

WBID# 1528
Site# 1
D.N.S.

WBID# 1528
Site# 2
D.N.S.

WBID# 1528
Site# 1
U.S.

WBID# 1528
Site# 2
U.S.

WBID# 1528
Site#
U.S.

WBID# 1528
Site# 2
"House Access"

WBID# 1528
Site# 3
D.N.S.