



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1687 Tributary to Busch Creek

Submitted by

Pickett Ray and Silver

To

Missouri Department of Natural Resources
Water Protection Program

Date Received: June 5, 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): Tributary to Busch Creek	
Missouri Waterbody Identification (WBID) Number: 1687 Tributary to Busch Creek	
8-digit HUC: 10300200	County: Franklin
Upstream Legal Description (from Table H): Section 35, 44N, 01W	
Downstream Legal Description(from Table H): Mouth	
Number of sites evaluated 3	
List all sites numbers, listed consequently upstream to downstream: 1687-1, 1687-2, 1687-3	

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

II. Subsegmentation (fill this section out only in cases where subsegmentation is being proposed)

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Upstream Coordinates: UTM X Y		Downstream Coordinates: UTM X Y	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
EPE	± _____ Feet or ± _____ Meters		
PDOP		± _____ Feet or ± _____ Meters	

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

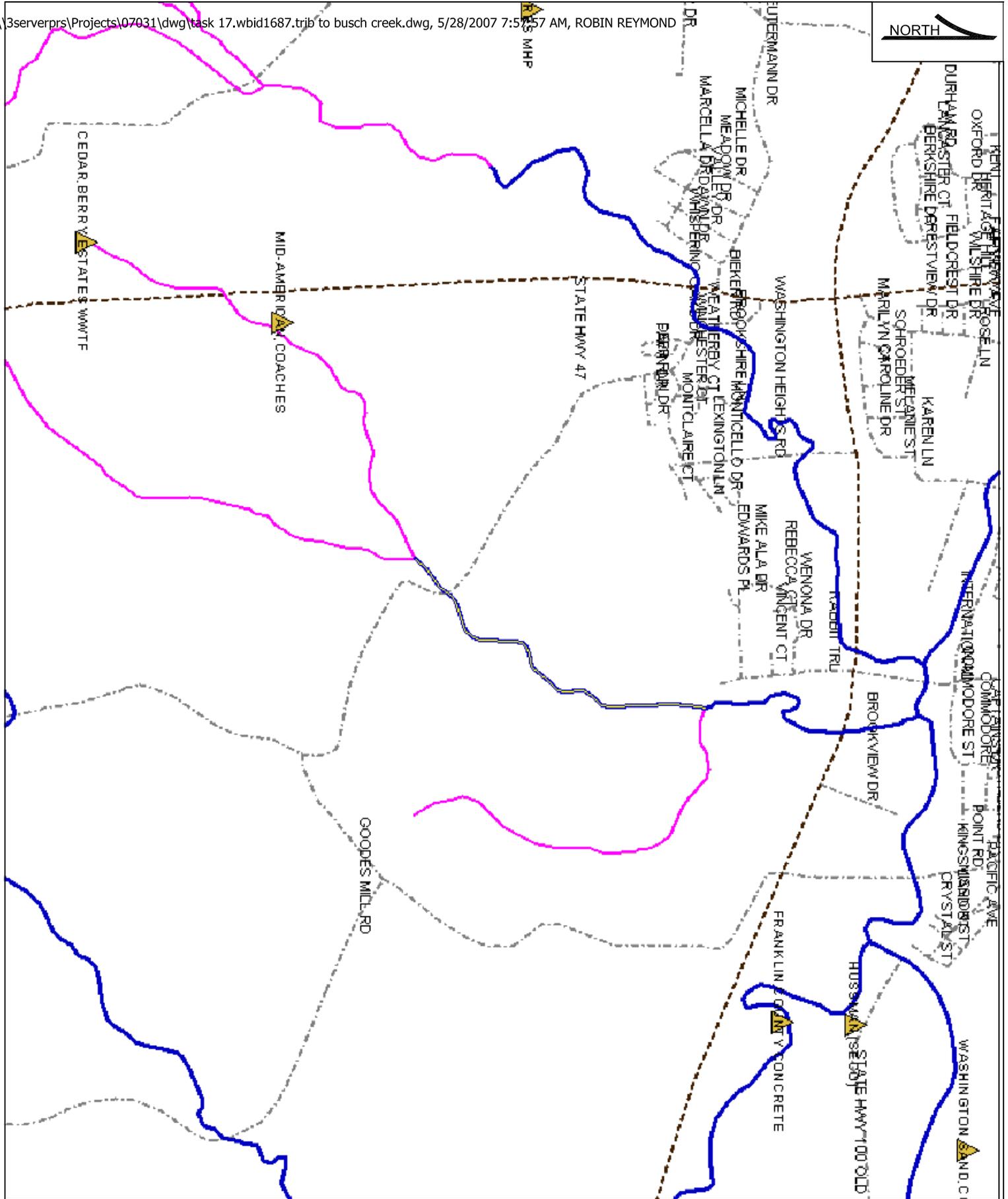
Discharger Facility Name(s): Mid-American Coaches
Discharger Permit Number(s): MO 0113964

IV. UAA Surveyor (please print legibly)

Name of Surveyor Robin Reymond	Telephone Number: 636-397-1211
Organization/Employer: Pickett, Ray & Silver, Inc.	
Position: Field Team Leader	

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

Signed: Robin ReymondDate: 5/10/07



PICKETT RAY & SILVER
 Civil Engineers Land Surveyors Natural Resources

Address: 333 Mid Rivers Mall Drive
 St. Peters, Missouri 63376

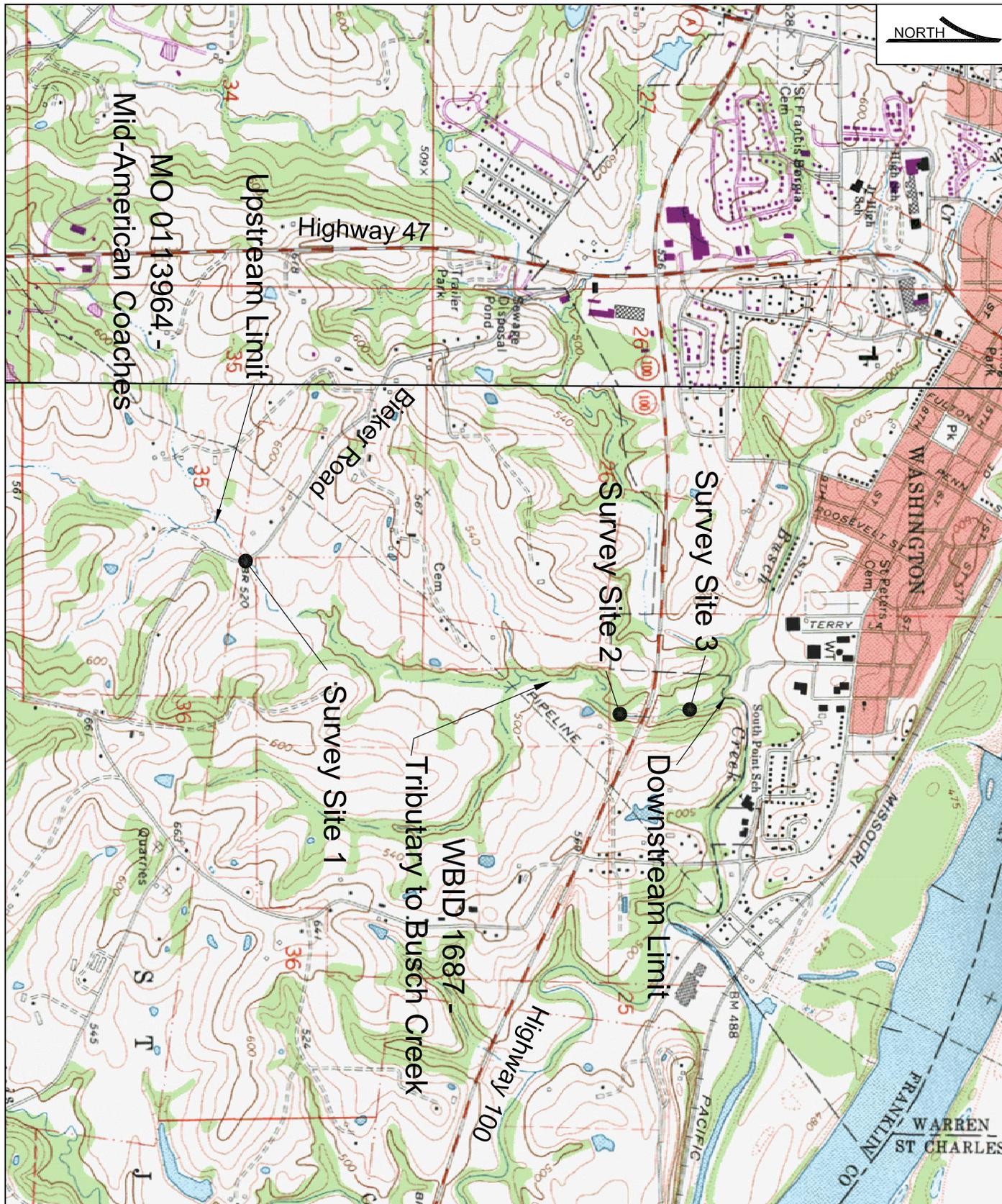
Phone: (636) 397-1211
 Fax: (636) 397-1104
 Website: www.prs3.com

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WBID #: 1687
 Name: Tributary to Busch Creek
 County: Franklin
 GIS Map


GRAPHIC SCALE
 Not to Scale

PRS Job Number: 07031.MODN.00E
 Drawn By: RLR Date: 05-24-07
 Checked By: JCV Date: 05-24-07



PICKETT RAY & SILVER

Civil Engineers Land Surveyors Natural Resources

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Website: www.prs3.com

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WBID #: 1687
Name: Tributary to Busch Creek
County: Franklin
USGS Location Map



GRAPHIC SCALE
Not to Scale

PRS Job Number: 07031.MODN.00E
Drawn By: RLR Date: 05-24-07
Checked By: JCV Date: 05-24-07

WBID# 1687
 Site# 1

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: 5/10/07 7 AM	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): PRS - RR/MC	Just upstream of effluent point of discharge to classified segment
Current Weather Conditions: Sunny 70°F	Facility Name: Mid-American Oaches
Weather Conditions for Past 10 days: Sun	Permit Number: MO 0113964
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 Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 675011.136m		Y: 4265749.203m	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other Real Time Differential Correction with	X
Real Time Differential Processing		Post Processing	
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP	3.9		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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.)				

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

Indications of Human Use*: (attach photos)

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

* Page Two – Data Sheet B for WBID # 1687-1 :

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? Yes No
 If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? Yes No
 If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

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

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

Moderate moss/algae grown on rock substrate 20% woody vegetation on gravel bars

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: livestock waste
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green murky	<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 checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

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

Surveyor's Signature: Robin Reymond Date of Survey: 5/10/07

Organization: PRS Position: Field Team Leader

Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: <u>1687</u> Site #: <u>1</u> Weather Conditions: <u>Sunny 65°F</u> GPS Location: _____ UTM X: <u>675011.136m</u> UTM Y: <u>4265749.203m</u> Horizontal Accuracy Estimate (GPS Data Quality): <u>+/- N/A</u> (feet) PDOP: <u>3.9</u>	Dissolved Oxygen Dissolved Oxygen: <u>4.69</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>19.9</u> (°C)
Average Stream Width: <u>3.4</u> (meters) Length of Survey Segment: <u>150</u> (meters)	
Field Staff: <u>PRS - RR/MC</u>	

Transect Cross-Section																						
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)	
1	0	.10	0	.10	0	.10				0	.03	0	.10	0.5	.11							
2	.35	.03	.4	.10	.21	.10				0.5	.06	.35	.20	0.8	.10							
3	.7	.02	.8	.13	.42	.11	Unattainable - due to livestock and electric fences				1.05	.03	.7	.29	1.1	.10	Unattainable - due to livestock and electric fences					
4	1.05	.03	1.2	.13	.63	.12					1.4	.03	1.05	.31	1.4	.13						
5	1.4	.09	1.6	.09	.84	.21					1.75	.04	1.4	.30	1.7	.22						
6	1.75	.09	2.0	.00	1.05	.26				2.1	.05	1.75	.30	2.0	.13							
7	2.1	.09	2.4	.34	1.26	.26				2.45	.06	2.1	.30	2.3	.16							
8	2.5	.06	2.8	.16	1.47	.20				2.8	.03	2.45	.27	2.6	.15							
9	3.0	.10	3.2	.10	1.68	.16				3.15	.03	2.8	.23	2.9	.11							
10	3.5	.03	3.6	.10	1.89	.10				3.5	.01	3.15	.14	3.2	.10							
11			4.0	.10	2.1	.10						3.5	.10	3.5	.11							
Width/Median Depth	3.5	0.9	4.0	.10	2.1	.12				3.5	.03	3.5	0.27	4.0	.11							
Feature Type (riffle, run, or pool)	Riffle		Riffle		Run		Run		Run		Riffle		Run		Run		Run		Run		Run	

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/10/07

WBID# 1687
 Site# 2

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: 5/10/07 8:30 AM	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): PRS - RR/MC	Upstream from Highway 100 Bridge
Current Weather Conditions: Sunny 70°F	Facility Name: Mid-American Oaches
Weather Conditions for Past 10 days: Sun	Permit Number: MO 0113964
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 Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 675588.342m		Y: 4267230.214m	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other Real Time Differential Correction with	x
Real Time Differential Processing		Post Processing	
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP	4.5		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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.)				

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

Indications of Human Use*: (attach photos)

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

* Page Two – Data Sheet B for WBID # 1687-2 :

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? Yes No

If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? Yes No

If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN 100%					
POOL					

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

% Cobble	15	% Gravel	5	% Sand	80	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Moderate moss/algae grown on rock substrate

Water Characteristics*: (Mark all that apply.)

Odor:	<input checked="" type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other: livestock waste
Color:	<input 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 checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

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

Surveyor's Signature: Robin Reymond Date of Survey: 5/10/07

Organization: PRS Position: Field Team Leader

Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: <u>1687</u> Site #: <u>2</u> Weather Conditions: <u>Cloudy 70°F</u> GPS Location: <u>675588.342m</u> UTM Y: <u>4267230.214m</u> UTM X: _____ UTM Y: _____ Horizontal Accuracy Estimate (GPS Data Quality): <u>+/- N/A</u> (feet) PDOP: <u>4.5</u>	Dissolved Oxygen
Average Stream Width: <u>4.4</u> (meters) Length of Survey Segment: <u>150</u> (meters)	Dissolved Oxygen: <u>6.92</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>19.9</u> (°C)
Field Staff: <u>PRS - RR/MC</u>	

Transect Cross-Section																						
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)	
1	0	.34	0	.30	0	.30	0	.11	0	.32	0	.12	0	.50	0	.20	0	.13	0	.13	0	.10
2	0.5	.45	.55	.23	.45	.38	0.5	.10	0.5	.40	0.5	.10	0.5	.56	0.5	.31	0.25	.12	0.25	.18	0.5	.10
3	1.0	.52	1.1	.35	.9	.45	1.0	.12	1.0	.48	1.0	.15	1.0	.65	1.0	.42	0.5	.13	0.5	.20	0.9	.12
4	1.5	.60	1.65	.40	1.8	.70	1.5	.25	1.5	.52	1.5	.16	1.5	.70	1.5	.50	0.75	.16	0.75	.23	1.2	.13
5	2.0	.68	2.2	.40	2.25	.62	2.0	.12	2.0	.50	2.0	.25	2.0	.60	2.0	.50	1.0	.18	1.0	.25	1.5	.20
6	2.5	.70	2.75	.45	2.7	.60	2.5	.10	2.5	.48	2.5	.48	2.5	.62	2.5	.34	1.25	.16	1.25	.26	1.8	.23
7	3.0	.75	3.3	.48	3.15	.52	3.0	.11	3.0	.42	3.0	.40	3.0	.72	3.0	.30	1.5	.15	1.5	.20	2.1	.20
8	3.5	.62	3.85	.52	3.6	.45	3.5	.12	3.5	.40	3.5	.38	3.5	.68	3.5	.21	1.75	.13	1.75	.15	2.4	.13
9	4.0	.60	4.4	.38	4.05	.40	4.0	.15	4.0	.35	4.0	.42	4.0	.50	4.0	.12	2.0	.11	2.0	.13	2.7	.10
10	4.5	.54	4.95	.36	4.25	.28	4.6	.14	4.5	.30	4.5	.35	4.5	.42	4.5	.10	2.25	.10	2.25	.11	3.0	.12
11	5.0	.48	5.5	.30	4.5	.25	5.2	.10	5.0	.25	5.0	.30	5.0	.35	5.0	.11	2.5	.10	2.5	.10	3.3	.11
Width/Median Depth	5.0	.60	5.5	.38	4.5	.45	5.2	.12	5.0	.40	5.5	.30	5.0	.60	5.0	.30	2.5	.13	2.5	.18	3.3	.12
Feature Type (riffle, run, or pool)	Run		Run																			

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/10/07

WBID# 1687
 Site# 3

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: 5/23/07 9:15 AM	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): PRS - RR/MC	Just upstream of confluence with Busch Creek
Current Weather Conditions: Cloudy 70°F	Facility Name: Mid-American Oaches
Weather Conditions for Past 10 days: Sun	Permit Number: MO 0113964
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 Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site GPS Coordinates: UTM X: 675662.954m		Y: 4267603.392m	
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other Real Time Differential Correction with	X
Real Time Differential Processing		Post Processing	
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters	
EPE	± _____ Feet or ± _____ Meters		
PDOP	4.2		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
See Attached Photos					

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.)				

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

Indications of Human Use*: (attach photos)

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

* Page Two – Data Sheet B for WBID # 1687-3 :

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? Yes No
 If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? Yes No
 If so, is there an obvious current? Yes No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE 40%					
RUN 60%					
POOL					

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

20	% Cobble	20	% Gravel	10	% Sand	10	% Silt	20	% Mud/Clay	20	% 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 checked="" type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input checked="" type="checkbox"/> Gray	<input checked="" 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 checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

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

Surveyor's Signature: Robin Reymond Date of Survey: 5/23/07

Organization: PRS Position: Field Team Leader

Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: <u>1687</u> Site #: <u>3</u> Weather Conditions: <u>Cloudy 70°F</u> GPS Location: <u>675662.954m</u> UTM X: <u>4267603.392m</u> UTM Y: Horizontal Accuracy Estimate (GPS Data Quality): <u>+/- N/A</u> (feet) PDOP: <u>4.2</u> Average Stream Width: <u>4.25</u> (meters) Length of Survey Segment: <u>150</u> (meters) Field Staff: <u>PRS - RR/MC</u>	Dissolved Oxygen Dissolved Oxygen: <u>9.06</u> (mg/L) Dissolved Oxygen: _____ (% sat) Specific Cond: _____ (µS/cm) Water Temperature: <u>18.4</u> (°C)
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Transect Cross-Section																						
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)	
1	0	.00	0	.00	0	.01	0.3	.10	0	.10	0	.12	0	.10	0	.04	1.0	.10	.10	.10	0	.08
2	.58	.00	.55	.00	.5	.07	0.6	.10	0.45	.21	.45	.18	0.45	.11	.47	.05	1.1	.11	.39	.20	.33	.01
3	1.16	.01	1.1	.01	1.0	.08	0.9	.12	0.9	.18	0.9	.22	0.9	.13	1.0	.04	1.2	.13	.68	.24	.66	.05
4	1.74	.02	1.66	.08	1.5	.06	1.2	.09	1.35	.30	1.35	.22	1.35	.17	1.5	.02	1.3	.13	.97	.29	.99	.03
5	2.32	.03	2.21	.08	2.0	.04	1.5	.12	1.8	.25	1.8	.16	1.8	.18	2.0	.04	1.4	.13	1.26	.33	1.32	.04
6	2.9	.04	2.76	.07	2.5	.03	1.8	.11	2.25	.20	2.25	.18	2.25	.21	2.5	.04	1.5	.13	1.55	.34	1.65	.05
7	3.5	.05	3.31	.05	3.0	.02	2.1	.10	2.7	.18	2.7	.20	2.7	.20	3.0	.05	1.6	.10	1.84	.35	1.98	.03
8	4.06	.08	3.86	.03	3.5	.01	2.4	.13	3.15	.16	3.15	.21	3.15	.20	3.5	.07	1.7	.11	2.13	.34	2.31	.02
9	4.64	.00	4.41	.02	4.0	.00	2.7	.12	3.6	.11	3.6	.15	3.6	.13	4.0	.08	1.8	.10	2.42	.32	2.64	.01
10	5.2	.01	5.0	.01	4.8	.00	3.0	.10	4.05	.12	4.05	.12	4.05	.11	4.2	.05	1.9	.10	2.71	.22	3.0	.02
11							3.5	.10	4.5	.10	4.5	.11	4.5	.10			2.0	.10	3.0	.10		
Width/Median Depth	5.2	.02	5.0	0.3	4.8	.03	4.0	.10	4.5	.18	4.5	.18	4.5	.13	4.2	.05	4.0	.11	3.0	.29	3.0	.03
Feature Type (riffle, run, or pool)	Riffle		Riffle		Riffle		Run		Riffle		Run		Riffle									

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.
 GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Signed: Robin Reymond Date: 5/23/07

WBID# 1687



Site# 1 Photo ID# Transect 1, Upstream



Site# 1 Photo ID# Transect 1, Downstream



Site# 2 Photo ID# Transect 1, Upstream



Site# 2 Photo ID# Transect 11, Downstream

WBID# 1687



Site# 3 Photo ID# Transect 11, Upstream



Site#3 Photo ID# Transect 1, Upstream