



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0883 Gabriel Creek

Submitted by
SES, Inc.

To
Missouri Department of Natural Resources
Water Protection Program

Date Received: September 10, 2007

Field Data Sheets for Recreation Use Stream Surveys
Data Sheet A - Water Body Identification
 (For water body being surveyed)

Water Body Information

Water Body Name:	Gabriel	WBID:	883
8 digit HUC code:	10300103	County:	Morgan
Upstream Legal Description	T44N	R19W	Sec 12
Downstream Legal Description	T42N	R19 W	Sec 3
Number of Sites Evaluated	8		
List all site numbers, listed upstream to downstream	8 7 6 5 4 3 2 1		

Discharger Facility Information

Discharger Facility Name(s):	Stover SW Lagoon
Discharger Permit Number(s):	MO 0047040

UAA Surveyor

Name of Surveyor:	Gilisa Gould	Telephone Number:	913-307-0046
Organization/Employer:	SES, Inc.		
Position:	Field Team Leader		

Signed: _____ Date: _____

WBID 883

Site 1

Site 2

Site 3

Site 4

Site 5

Site 6

Site 7

Site 8

Gabriel Cr.

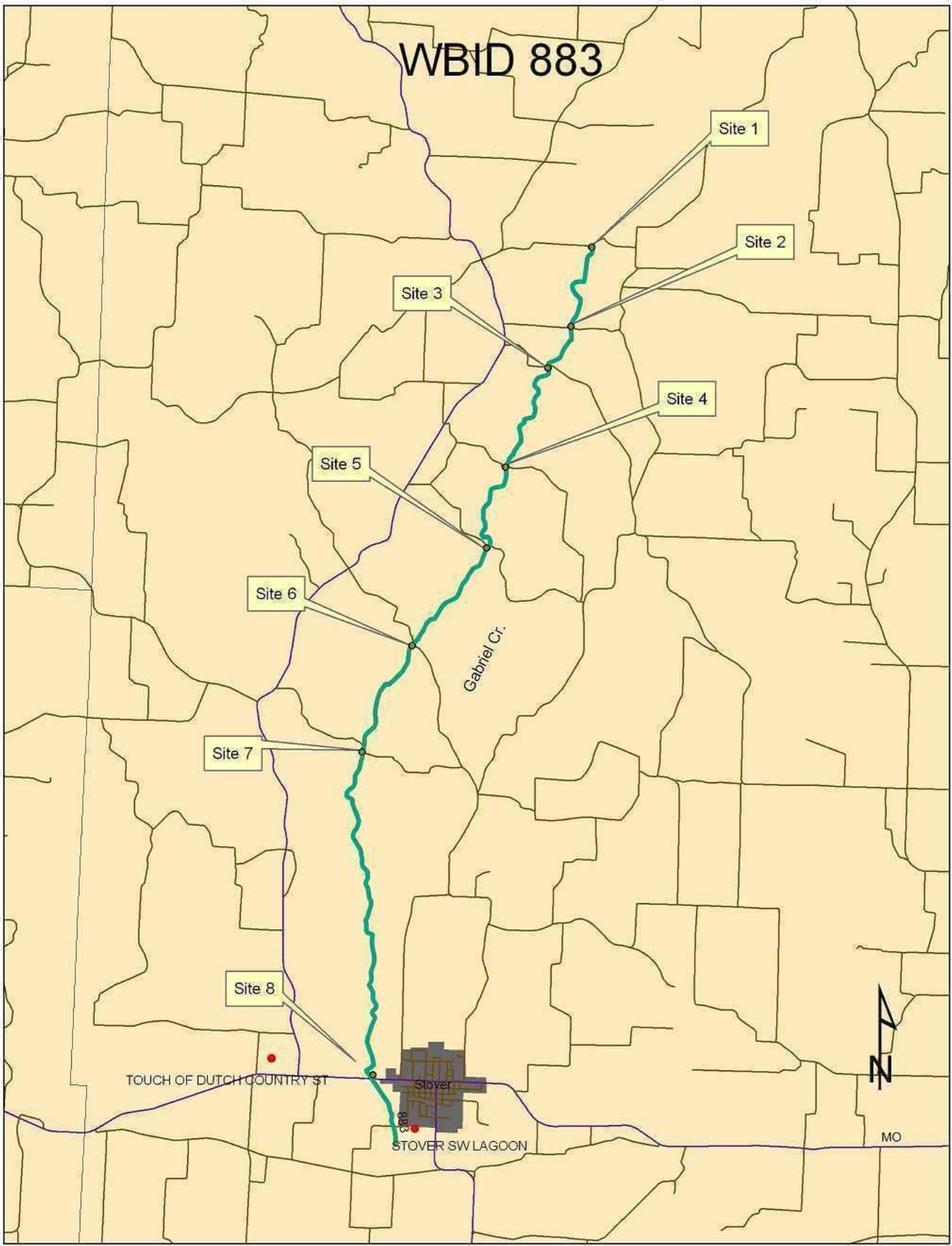
TOUCH OF DUTCH COUNTRY ST

Stover

STOVER SW LAGOON



MO



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

WBID 883
Site # 1

Date and Time: 8/20/2007 4:50 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Florence Trail

GPS Mark: 37

Upstream Photo 11 Downstream Photo 10

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	<u>RV/ATV Tracks Pic #12</u>	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 883 **Site #** 1
Mark # 37 **Dissolved Oxygen (ppm)** 4.8
Upstream Views Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? y

Select one of the following channel features:

	% of Channel Feature				
Riffle	27				
Run	18				
Pool	55				

Downstream View's Physical Dimensions: Is there any water present at this view? y
 If so, is there an obvious current? n

Substrate:

14% Cobble	68% Gravel	% Sand	% Silt
% Mud/Clay	18% Bedrock		

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

none

Water Characteristics

Odor Sewage Musky Chemical **None** Other
 Color **Clear** Green Gray Milky Other
 Bottom Deposit Sludge Solids Fine Sed. **None** Other
 Surface Deposit Oil Scum Foam **None** Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 1

Mark # 37

WBID # 883

	Depth (m)
Transect 1	0.00
Substrate:	0.05
gravel	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.10
pool	0.10
Channel Width:	0.05
3.00	0.05
0.08	0.00
Transect 2	0.00
Substrate:	0.05
cobble/gravel	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
run	0.05
Channel Width:	0.05
3.00	0.00
0.05	0.00
Transect 3	0.00
Substrate:	0.05
gravel	0.05
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
10.00	0.05
0.00	0.00
Transect 4	0.00
Substrate:	0.10
gravel	0.15
Water Clarity:	0.25
clear	0.35
Channel Feature:	0.30
pool	0.35
Channel Width:	0.35
10.00	0.25
0.25	0.05

	Depth (m)
Transect 5	0.00
Substrate:	0.10
gravel	0.25
Water Clarity:	0.50
clear	0.60
Channel Feature:	0.75
pool	0.75
Channel Width:	0.60
8.00	0.45
0.48	0.30
Transect 6	0.20
Substrate:	0.60
bedrock/gravel	0.80
Water Clarity:	0.85
clear	0.80
Channel Feature:	0.50
pool	0.25
Channel Width:	0.30
8.00	0.10
0.40	0.05
Transect 7	0.05
Substrate:	0.20
bedrock/gravel	0.50
Water Clarity:	0.35
clear	0.60
Channel Feature:	0.75
pool	0.65
Channel Width:	0.55
7.00	0.45
0.48	0.15
Transect 8	0.10
Substrate:	0.35
bedrock/gravel	0.50
Water Clarity:	0.60
clear	0.60
Channel Feature:	0.60
run	0.35
Channel Width:	0.25
6.00	0.20
0.35	0.10

	Depth (m)
Transect 9	0.05
Substrate:	0.15
bedrock/gravel	0.20
Water Clarity:	0.45
some	0.60
Channel Feature:	0.55
pool	0.50
Channel Width:	0.40
6.00	0.25
0.33	0.15
Transect 10	0.00
Substrate:	0.00
cobble/gravel	0.00
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
riffle	0.10
Channel Width:	0.10
5.00	0.05
0.05	0.00
Transect 11	0.00
Substrate:	0.00
cobble/gravel	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
riffle	0.00
Channel Width:	0.00
3.00	0.00
0.00	0.00

Site Median	Site Maximum
0.10	0.85

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

WBID 883
 Site # 2

Date and Time: 8/20/2007 4:55pm

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway BB

GPS Mark: 38

Upstream Photo 14 Downstream Photo 13

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

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

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 2

Mark # 38

WBID # 883

	Depth (m)
Transect 1	0.00
Substrate:	0.05
gravel	0.10
Water Clarity:	0.20
clear	0.50
Channel Feature:	0.65
pool	0.75
Channel Width:	0.75
8.00	0.60
0.43	0.35
Transect 2	0.00
Substrate:	0.00
cobbly gravel	0.00
Water Clarity:	0.00
clear	0.10
Channel Feature:	0.15
pool	0.20
Channel Width:	0.20
8.00	0.20
0.13	0.20
Transect 3	0.00
Substrate:	0.00
cobbly gravel	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.10
riffle	0.10
Channel Width:	0.15
8.00	0.10
0.05	0.05
Transect 4	0.00
Substrate:	0.00
cobbly gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
12.00	0.00
0.00	0.00

	Depth (m)
Transect 5	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
pool	0.00
Channel Width:	0.00
12.00	0.00
0.00	0.00
Transect 6	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
15.00	0.00
0.00	0.00
Transect 7	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
15.00	0.00
0.00	0.00
Transect 8	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
15.00	0.00
0.00	0.00

	Depth (m)
Transect 9	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
15.00	0.00
0.00	0.00
Transect 10	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
pool	0.00
Channel Width:	0.00
13.00	0.00
0.00	0.00
Transect 11	0.00
Substrate:	0.00
cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
pool	0.00
Channel Width:	0.00
17.00	0.00
0.00	0.00
Site Median	0.00
Site Maximum	0.75

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

WBID 883
Site # 3

Date and Time: 8/20/2007 5:40 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Chester Drive

GPS Mark: 39

Upstream Photo 18 Downstream Photo 17

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	<u>RV/ATV Tracks Pic #16</u>	Camping Sites	<u>Fire pit/ring Pic #15</u>
NPDES Discharge	Fishing Tackle	Other:	

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 3

Mark # 39

WBID # 883

	Depth (m)
Transect 1	0.05
Substrate:	0.10
gravel	0.15
Water Clarity:	0.15
clear	0.20
Channel Feature:	0.20
run	0.20
Channel Width:	0.25
5.00	0.20
0.18	0.05
Transect 2	0.00
Substrate:	0.00
cobble/gravel	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
2.00	0.00
0.00	0.00
Transect 3	0.00
Substrate:	0.05
cobble/gravel	0.05
Water Clarity:	0.05
none	0.10
Channel Feature:	0.05
run	0.05
Channel Width:	0.00
7.00	0.05
0.05	0.05
Transect 4	0.05
Substrate:	0.10
cobble/gravel	0.10
Water Clarity:	0.05
clear	0.00
Channel Feature:	0.00
run	0.15
Channel Width:	0.15
9.00	0.20
0.10	0.20

	Depth (m)
Transect 5	0.00
Substrate:	0.10
gravel	0.30
Water Clarity:	0.50
none	0.65
Channel Feature:	0.80
pool	0.90
Channel Width:	0.80
6.00	0.70
0.68	0.80
Transect 6	0.10
Substrate:	0.40
gravel	0.70
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8.00	1.00
1.00	1.00
Transect 7	0.10
Substrate:	0.50
gravel	0.90
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8.00	1.00
1.00	1.00
Transect 8	0.15
Substrate:	0.50
gravel	0.50
Water Clarity:	0.80
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
9.00	1.00
1.00	1.00

	Depth (m)
Transect 9	0.00
Substrate:	0.15
gravel	0.30
Water Clarity:	0.60
none	0.65
Channel Feature:	0.65
pool	0.55
Channel Width:	0.60
6.00	0.60
0.60	0.60
Transect 10	0.00
Substrate:	0.00
gravel	0.10
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.20
run	0.20
Channel Width:	0.30
5.00	0.30
0.18	0.20
Transect 11	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
3.00	0.00
0.00	0.00
Site Median	Site Maximum
0.18	1.00

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

WBID 883
 Site # 4

Date and Time: 8/20/2007

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Rasa Drive

GPS Mark: 40

Upstream Photo 20 Downstream Photo 19

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	<u>No trespass sign</u>	Fence
Steep slopes	None of the Above	Other	

Indications of Human Use

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

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 4

Mark # 40

WBID # 883

	Depth (m)
Transect 1	0.00
Substrate:	0.00
gravel	0.05
Water Clarity:	0.05
clear	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
3.00	0.00
0.00	0.00
Transect 2	0.00
Substrate:	0.10
gravel	0.15
Water Clarity:	0.15
clear	0.20
Channel Feature:	0.25
run	0.25
Channel Width:	0.20
7.00	0.20
0.20	0.25
Transect 3	0.05
Substrate:	0.15
gravel	0.25
Water Clarity:	0.30
clear	0.40
Channel Feature:	0.40
run	0.30
Channel Width:	0.30
7.00	0.30
0.30	0.30
Transect 4	0.05
Substrate:	0.10
gravel	0.20
Water Clarity:	0.30
clear	0.40
Channel Feature:	0.50
run	0.60
Channel Width:	0.55
7.00	0.55
0.45	0.50

	Depth (m)
Transect 5	0.05
Substrate:	0.15
gravel	0.30
Water Clarity:	0.35
clear	0.80
Channel Feature:	0.95
run	1.00
Channel Width:	1.00
8.00	1.00
0.80	0.80
Transect 6	0.10
Substrate:	0.30
gravel	0.75
Water Clarity:	0.90
some	0.90
Channel Feature:	0.95
pool	0.80
Channel Width:	0.60
9.00	0.50
0.68	0.25
Transect 7	0.05
Substrate:	0.30
gravel	0.40
Water Clarity:	0.75
some	0.85
Channel Feature:	0.95
run	0.70
Channel Width:	0.65
7.00	0.50
0.58	0.25
Transect 8	0.00
Substrate:	0.05
gravel	0.00
Water Clarity:	0.15
some	0.30
Channel Feature:	0.60
run	0.60
Channel Width:	0.50
9.00	0.50
0.40	0.50

	Depth (m)
Transect 9	0.10
Substrate:	0.20
bedrock/gravel	0.20
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.35
riffle	0.35
Channel Width:	0.50
15.00	0.40
0.20	0.10
Transect 10	0.00
Substrate:	0.10
cobble/gravel	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.10
riffle	0.10
Channel Width:	0.10
12.00	0.10
0.08	0.05
Transect 11	0.05
Substrate:	0.05
cobble/gravel	0.00
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.05
riffle	0.15
Channel Width:	0.10
6.00	0.10
0.05	0.00
Site Median	Site Maximum
0.20	1.00

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

WBID 883
 Site # 5

Date and Time: 8/20/2007 6:35 PM

Current Weather Conditions cloudy

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Rattlesnake Rd

GPS Mark: 41

Upstream Photo 22 Downstream Photo 21

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	<u>RV/ATV Tracks</u> <u>picture 23</u>	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

WBID # 883 **Site #** 5
Mark # 41 **Dissolved Oxygen (ppm)** 1.8
Upstream Views Physical Dimensions: Is there any water present at this view? n

If so, is there an obvious current?

Select one of the following channel features:

% of Channel Feature

Riffle					
Run	55				
Pool	45				

Downstream View's Physical Dimensions: Is there any water present at this view? n

If so, is there an obvious current?

Substrate:

% Cobble	100% Gravel	% Sand	% Silt
----------	-------------	--------	--------

% Mud/Clay	% Bedrock
------------	-----------

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

none

Water Characteristics

Odor Sewage Musky Chemical **None** Other
 Color Clear **Green** Gray Milky Other
 Bottom Deposit Sludge Solids Fine Sed. **None** Other
 Surface Deposit **Oil** Scum Foam None Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 5

Mark # 41

WBID # 883

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.00	Transect 5	0.00	Transect 9	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.00	gravel	0.00	gravel	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
N/A	0.00	N/A	0.00	N/A	0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
run	0.00	run	0.00	pool	0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
5 yards	0.00	7 yards	0.00	13 yards	0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 2	0.00	Transect 6	0.00	Transect 10	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.00	gravel	0.00	gravel	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
N/A	0.00	N/A	0.00	N/A	0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
pool	0.00	pool	0.00	run	0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
5 yards	0.00	15 yards	0.00	8 yards	0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 3	0.00	Transect 7	0.00	Transect 11	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.05	gravel	0.00	gravel	0.00
Water Clarity:	0.10	Water Clarity:	0.00	Water Clarity:	0.00
clear	0.10	N/A	0.00	N/A	0.00
Channel Feature:	0.15	Channel Feature:	0.00	Channel Feature:	0.00
run	0.15	pool	0.00	run	0.00
Channel Width:	0.15	Channel Width:	0.00	Channel Width:	0.00
3 yards	0.10	12 yards	0.00	7 yards	0.00
0.10	0.00	0.00	0.00	0.00	0.00
Transect 4	0.00	Transect 8	0.00	Site Median	0.00
Substrate:	0.00	Substrate:	0.00	Site Maximum	0.15
gravel	0.00	gravel	0.00		
Water Clarity:	0.00	Water Clarity:	0.00		
N/A	0.00	N/A	0.00		
Channel Feature:	0.00	Channel Feature:	0.00		
run	0.00	pool	0.00		
Channel Width:	0.00	Channel Width:	0.00		
5 yards	0.00	12 yards	0.00		
0.00	0.00	0.00	0.00		

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

WBID 883
 Site # 6

Date and Time: 8/20/2007

Current Weather Conditions clear

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Ehlers Road

GPS Mark: 42

Upstream Photo 25 Downstream Photo 26

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

Roads	Rope swings	Foot paths/prints	Dock/platform
Livestock Watering	<u>RV/ATV Tracks</u>	Camping Sites	Fire pit/ring
NPDES Discharge	Fishing Tackle	Other:	

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 6

Mark # 42

WBID # 883

	Depth (m)
Transect 1	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
pool	0.00
Channel Width:	0.00
5.00	0.00
0.00	0.00
Transect 2	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
2.00	0.00
0.00	0.00
Transect 3	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.10
clear	0.05
Channel Feature:	0.10
pool	0.05
Channel Width:	0.05
3.00	0.05
0.05	0.05
Transect 4	0.00
Substrate:	0.05
gravel	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.15
run	0.15
Channel Width:	0.15
4.00	0.10
0.10	0.05

	Depth (m)
Transect 5	0.00
Substrate:	0.10
gravel	0.05
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.20
pool	0.40
Channel Width:	0.45
6.00	0.45
0.18	0.50
Transect 6	0.00
Substrate:	0.10
gravel	0.15
Water Clarity:	0.25
clear	0.20
Channel Feature:	0.25
run	0.30
Channel Width:	0.30
5.00	0.40
0.25	0.25
Transect 7	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
clear	0.05
Channel Feature:	0.05
run	0.05
Channel Width:	0.00
3.00	0.00
0.00	0.00
Transect 8	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
run	0.00
Channel Width:	0.00
5.00	0.00
0.00	0.00

	Depth (m)
Transect 9	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
7.00	0.00
0.00	0.00
Transect 10	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
8.00	0.00
0.00	0.00
Transect 11	0.00
Substrate:	0.00
gravel	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
8.00	0.00
0.00	0.00
Site Median	0.00
Site Maximum	0.50

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

WBID 883
 Site # 7

Date and Time: 8/20/2007 7:30 PM

Current Weather Conditions clear

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Pyremont Rd.

GPS Mark: 43

Upstream Photo 28 Downstream Photo 27

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	Urban areas
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	<u>None of the Above</u>	Other	

Indications of Human Use

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

WBID # 883 **Site #** 7
Mark # 43 **Dissolved Oxygen (ppm)** n/a
Upstream Views Physical Dimensions: Is there any water present at this view? n

If so, is there an obvious current?

Select one of the following channel features:

	% of Channel Feature				
Riffle	27				
Run	45				
Pool	28				

Downstream View's Physical Dimensions: Is there any water present at this view? n

If so, is there an obvious current?

Substrate:

% Cobble	100% Gravel	% Sand	% Silt
% Mud/Clay	% Bedrock		

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

none

Water Characteristics

Odor	Sewage	Musky	Chemical	None	Other
Color	Clear	Green	Gray	Milky	Other N/A
Bottom Deposit	Sludge	Solids	Fine Sed.	None	Other
Surface Deposit	Oil	Scum	Foam	None	Other

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 7

Mark # 43

WBID # 883

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.00	Transect 5	0.00	Transect 9	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.00	gravel	0.00	gravel	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
n/a	0.00	n/a	0.00	n/a	0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
run	0.00	rifle	0.00	pool	0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
5 yards	0.00	7 yards	0.00	6 yards	0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 2	0.00	Transect 6	0.00	Transect 10	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.00	gravel	0.00	gravel	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
n/a	0.00	n/a	0.00	n/a	0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
run	0.00	rifle	0.00	run	0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
5 yards	0.00	7 yards	0.00	5 yards	0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 3	0.00	Transect 7	0.00	Transect 11	0.00
Substrate:	0.00	Substrate:	0.00	Substrate:	0.00
gravel	0.00	gravel	0.00	gravel	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
n/a	0.00	n/a	0.00	n/a	0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
run	0.00	pool	0.00	run	0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
6 yards	0.00	8 yards	0.00	7 yards	0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 4	0.00	Transect 8	0.00	Site Median	Site Maximum
Substrate:	0.00	Substrate:	0.00	0.00	0.00
gravel	0.00	gravel	0.00		
Water Clarity:	0.00	Water Clarity:	0.00		
n/a	0.00	n/a	0.00		
Channel Feature:	0.00	Channel Feature:	0.00		
rifle	0.00	pool	0.00		
Channel Width:	0.00	Channel Width:	0.00		
7 yards	0.00	6 yards	0.00		
0.00	0.00	0.00	0.00		

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

WBID 883
 Site # 8

Date and Time: 8/21/2007 9:30 AM

Current Weather Conditions clear

Weather Conditions for Past 10 days: 0.3 inches was maximum rainfall

Drought Conditions? No

Site Location (e.g. road crossing) Highway 52

GPS Mark: 44

Upstream Photo 29 Downstream Photo 30

Uses Observed (Uses actually observed at time of survey) Circle

Swimming	Skin Diving	SCUBA diving	Tubing
Water Skiing	Wind Surfing	Kayaking	Boating
Wading	Rafting	Hunting	Trapping
Fishing	<u>None of the Above</u>	Other	

Surrounding Conditions

City/county parks	Playgrounds	MDC conservation lands	<u>Urban areas</u>
Campgrounds	Boating accesses	State parks	National Forests
Nature trails	Stairs/walkway	No trespass sign	Fence
Steep slopes	None of the Above	Other	

Indications of Human Use

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

Data Sheet C: Cross-Sectional Depth Measurements (for estimation of median depth)
(Median Depth Shown in Bold)

Site # 8

Mark # 44

WBID # 883

	Depth (m)
Transect 1	0.10
Substrate:	0.05
gravel	0.30
Water Clarity:	0.35
none	0.50
Channel Feature:	0.60
run	0.70
Channel Width:	0.50
5.00	0.20
0.33	0.10
Transect 2	0.15
Substrate:	0.20
bedrock/gravel	0.30
Water Clarity:	0.35
none	0.35
Channel Feature:	0.30
run	0.35
Channel Width:	0.10
6.00	0.10
0.25	0.10
Transect 3	0.10
Substrate:	0.30
bedrock	0.35
Water Clarity:	0.40
none	0.40
Channel Feature:	0.40
run	0.45
Channel Width:	0.45
7.00	0.40
0.40	0.10
Transect 4	0.10
Substrate:	0.10
bedrock/gravel	0.20
Water Clarity:	0.35
none	0.45
Channel Feature:	0.60
run	0.60
Channel Width:	0.55
8.00	0.25
0.30	0.10

	Depth (m)
Transect 5	0.20
Substrate:	0.40
bedrock/gravel	0.40
Water Clarity:	0.45
none	0.45
Channel Feature:	0.40
run	0.40
Channel Width:	0.30
6.00	0.20
0.40	0.10
Transect 6	0.25
Substrate:	0.35
bedrock/gravel	0.40
Water Clarity:	0.50
none	0.45
Channel Feature:	0.50
run	0.50
Channel Width:	0.60
6.00	0.50
0.48	0.30
Transect 7	0.10
Substrate:	0.25
bedrock/gravel	0.35
Water Clarity:	0.35
none	0.30
Channel Feature:	0.25
run	0.30
Channel Width:	0.20
6.00	0.10
0.25	0.10
Transect 8	0.05
Substrate:	0.10
bedrock/gravel	0.10
Water Clarity:	0.15
none	0.10
Channel Feature:	0.10
run	0.10
Channel Width:	0.05
6.00	0.10
0.10	0.05

	Depth (m)
Transect 9	0.00
Substrate:	0.00
gravel	0.10
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.10
run	0.15
Channel Width:	0.10
5.00	0.10
0.10	0.05
Transect 10	0.00
Substrate:	0.00
cobble/gravel	0.00
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
run	0.05
Channel Width:	0.10
3.00	0.00
0.00	0.00
Transect 11	0.05
Substrate:	0.10
cobble/gravel	0.00
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.20
run	0.20
Channel Width:	0.05
5.00	0.20
0.10	0.10

Site Median	Site Maximum
0.20	0.70

WBID# 883



Site# 1 Photo ID# 11, Upstream



Site# 1 Photo ID# 10, Downstream



Site# 1 Photo ID# 12, RV/ATV tracks

WBID# 883



Site# 2 Photo ID# 14, Upstream



Site# 2 Photo ID# 13, Downstream



Site# 3 Photo ID# 18, Upstream



Site# 3 Photo ID# 17, Downstream

WBID# 883



Site# 3 Photo ID# 16, RV/ATV tracks



Site# 3 Photo ID# 15, Fire pit



Site# 4 Photo ID# 20, Upstream



Site# 4 Photo ID# 19, Downstream

WBID# 883



Site# 5 Photo ID# 22, Upstream



Site# 5 Photo ID# 21, Downstream



Site# 5 Photo ID# 23, RV/ATV tracks

WBID# 883



Site# 6 Photo ID# 25, Upstream



Site# 6 Photo ID# 26, Downstream



Site# 7 Photo ID# 28, Upstream



Site# 7 Photo ID# 27, Downstream

WBID# 883



Site# 8 Photo ID# 29, Upstream



Site# 8 Photo ID# 30, Downstream