

Use Attainability Analysis

for

WBID 0747 Fowler Creek

Submitted by

SES, Inc.

To

Missouri Department of Natural Resources

Water Protection Program

Date Received: June 3, 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:	Fowler Creek	WBID:	747
8 digit HUC code:	10300102	County:	Boone
Upstream Legal Description	46N 12W 12		
Downstream Legal Description	46N 12W 36		
Number of Sites Evaluated	3		
List all site numbers, listed upstream to downstream	1,2,3		

Discharger Facility Information

Discharger Facility Name(s):	Columbia Regional Airport
Discharger Permit Number(s):	MO 0092924

UAA Surveyor

Name of Surveyor:	Nolan Pringle	Telephone Number:	(913) 307-0054
Organization/Employer:	SES, Inc.		
Position:	Field Team Leader		

Signed: _____ Date: _____

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

WBID 747
 Site # 1

Date and Time: 5/30/2007 10:30

Current Weather Conditions Overcast

Weather Conditions for Past 10 days: 1.19 inches rainfall

Drought Conditions? No

Site Location (e.g. road crossing) At HWY Y road crossing

GPS Mark: 80

Upstream Photo 149 Downstream Photo 148

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	None of the Above	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	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:	None of the Above

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

Site # 1

Mark # 80

0747_Fowler Creek_Boone

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.05	Transect 9	0.05
Substrate:	0.05	Substrate:	0.05	Substrate:	0.20
Cobble,gravel,silt	0.10	Bedrock	0.05	rock,cobble,gravel,silt	0.25
Water Clarity:	0.15	Water Clarity:	0.10	Water Clarity:	0.25
clear	0.10	clear	0.10	clear	0.20
Channel Feature:	0.10	Channel Feature:	0.10	Channel Feature:	0.20
pool	0.10	Pool	0.05	pool	0.25
Channel Width:	0.05	Channel Width:	0.05	Channel Width:	0.25
7 yards	0.05	2 yards	0.05	6 yards	0.10
0.08	0.05	0.05	0.05	0.20	0.05
Transect 2	0.05	Transect 6	0.20	Transect 10	0.05
Substrate:	0.15	Substrate:	0.20	Substrate:	0.15
Cobble,gravel,silt	0.05	Bedrock, gravel	0.05	bedrock,cobble,gravel	0.30
Water Clarity:	0.00	Water Clarity:	0.05	Water Clarity:	0.30
clear	0.00	clear	0.10	clear	0.30
Channel Feature:	0.00	Channel Feature:	0.10	Channel Feature:	0.25
pool/riffle	0.05	pool	0.30	pool	0.20
Channel Width:	0.00	Channel Width:	0.30	Channel Width:	0.15
8 yards	0.05	2 yards	0.30	5 yards	0.05
0.05	0.05	0.20	0.30	0.18	0.05
Transect 3	0.05	Transect 7	0.20	Transect 11	0.05
Substrate:	0.10	Substrate:	0.20	Substrate:	0.05
Gravel, Cobble	0.05	Bedrock,cobble,gravel	0.20	rock,cobble,gravel,silt	0.10
Water Clarity:	0.05	Water Clarity:	0.05	Water Clarity:	0.15
clear	0.00	clear	0.15	clear	0.20
Channel Feature:	0.00	Channel Feature:	0.15	Channel Feature:	0.30
pool/riffle	0.00	pool	0.20	pool	0.10
Channel Width:	0.05	Channel Width:	0.25	Channel Width:	0.10
3 yards	0.05	2 yards	0.25	6 yards	0.10
0.05	0.05	0.20	0.25	0.10	0.05
Transect 4	0.05	Transect 8	0.10		
Substrate:	0.05	Substrate:	0.20	Site Median	Site Maximum
Gravel, Cobble	0.05	rock,gravel,cobble,silt	0.25	0.08	0.30
Water Clarity:	0.05	Water Clarity:	0.30		
clear	0.00	clear	0.30		
Channel Feature:	0.00	Channel Feature:	0.25		
riffle	0.00	pool	0.05		
Channel Width:	0.00	Channel Width:	0.05		
2 yards	0.00	3 yards	0.05		
0.03	0.05	0.15	0.05		

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

WBID 747
 Site # 2

Date and Time: 5/30/2007 11:20

Current Weather Conditions Overcast

Weather Conditions for Past 10 days: 1.19 inches rainfall

Drought Conditions? No

Site Location (e.g. road crossing) .75 miles downstream of HWY Y road crossing

GPS Mark: 82

Upstream Photo 151 Downstream Photo 150

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	None of the Above	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	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:	None of the Above

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

Site # 2

Mark # 82

0747_Fowler Creek_Boone

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.05	Transect 5	0.10	Transect 9	0.10
Substrate:	0.00	Substrate:	0.10	Substrate:	0.15
Bedrock	0.00	bedrock	0.20	cobble, bedrock	0.25
Water Clarity:	0.00	Water Clarity:	0.25	Water Clarity:	0.35
clear	0.00	clear	0.25	clear	0.45
Channel Feature:	0.05	Channel Feature:	0.30	Channel Feature:	0.45
pool/riffle	0.05	pool	0.20	pool	0.35
Channel Width:	0.05	Channel Width:	0.25	Channel Width:	0.45
12 yards	0.05	11 yards	0.20	10 yards	0.25
0.05	0.05	0.20	0.10	0.30	0.15
Transect 2	0.05	Transect 6	0.10	Transect 10	0.05
Substrate:	0.00	Substrate:	0.35	Substrate:	0.20
bedrock	0.00	bedrock	0.35	rock,cobble,gravel,silt	0.35
Water Clarity:	0.00	Water Clarity:	0.45	Water Clarity:	0.40
clear	0.00	clear	0.40	clear	0.45
Channel Feature:	0.05	Channel Feature:	0.45	Channel Feature:	0.45
pool/riffle	0.05	pool	0.50	pool	0.45
Channel Width:	0.05	Channel Width:	0.50	Channel Width:	0.50
12 yards	0.05	10 yards	0.35	12 yards	0.45
0.05	0.05	0.38	0.25	0.43	0.30
Transect 3	0.05	Transect 7	0.10	Transect 11	0.20
Substrate:	0.05	Substrate:	0.35	Substrate:	0.10
Bedrock	0.00	bedrock	0.40	rock,cobble,gravel,silt	0.15
Water Clarity:	0.00	Water Clarity:	0.45	Water Clarity:	0.40
clear	0.00	clear	0.50	clear	0.25
Channel Feature:	0.00	Channel Feature:	0.50	Channel Feature:	0.35
pool/riffle	0.05	pool	0.45	pool	0.25
Channel Width:	0.05	Channel Width:	0.45	Channel Width:	0.10
10 yards	0.05	11 yards	0.30	16 yards	0.05
0.05	0.05	0.43	0.25	0.18	0.10
Transect 4	0.10	Transect 8	0.15	Site Median	Site Maximum
Substrate:	0.15	Substrate:	0.25	0.20	0.50
Bedrock	0.20	cobble, bedrock	0.40		
Water Clarity:	0.25	Water Clarity:	0.45		
clear	0.10	clear	0.45		
Channel Feature:	0.10	Channel Feature:	0.50		
pool/riffle	0.20	pool	0.45		
Channel Width:	0.20	Channel Width:	0.45		
8 yards	0.00	11 yards	0.40		
0.13	0.05	0.43	0.25		

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

WBID 747
 Site # 3

Date and Time: 5/30/2007 12:15

Current Weather Conditions Overcast

Weather Conditions for Past 10 days: 1.19 inches rainfall

Drought Conditions? No

Site Location (e.g. road crossing) 1.5 miles downstream

GPS Mark: 83

Upstream Photo 153 Downstream Photo 152

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	None of the Above	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	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:	None of the Above

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

Site # 3

Mark # 83

0747_Fowler Creek_Boone

	Depth (m)
Transect 1	0.05
Substrate:	0.05
Bedrock,cobble,gravel	0.10
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
pool	0.05
Channel Width:	0.05
2 yards	0.05
0.05	0.05
Transect 2	0.05
Substrate:	0.10
Bedrock,cobble,gravel	0.10
Water Clarity:	0.15
clear	0.05
Channel Feature:	0.05
pool	0.10
Channel Width:	0.10
4 yards	0.10
0.10	0.10
Transect 3	0.05
Substrate:	0.05
Cobble,gravel,silt	0.05
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
pool	0.10
Channel Width:	0.10
5 yards	0.05
0.05	0.05
Transect 4	0.00
Substrate:	0.00
Gravel, cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
n/a	0.00
Channel Width:	0.00
n/a	0.00
0.00	0.00

	Depth (m)
Transect 5	0.10
Substrate:	0.40
Cobble,gravel,silt	0.45
Water Clarity:	0.50
clear	0.25
Channel Feature:	0.05
pool	0.20
Channel Width:	0.35
10 yards	0.45
0.35	0.40
Transect 6	0.10
Substrate:	0.10
Cobble,gravel,silt	0.00
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.05
pool	0.10
Channel Width:	0.20
11 yards	0.10
0.10	0.05
Transect 7	0.05
Substrate:	0.10
Cobble,gravel,silt	0.15
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.25
pool	0.25
Channel Width:	0.30
9 yards	0.30
0.20	0.15
Transect 8	0.15
Substrate:	0.15
Cobble,gravel,silt	0.20
Water Clarity:	0.15
clear	0.15
Channel Feature:	0.15
pool	0.10
Channel Width:	0.10
9 yards	0.05
0.15	0.05

	Depth (m)
Transect 9	0.00
Substrate:	0.00
Gravel, cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
n/a	0.00
Channel Width:	0.00
n/a	0.00
0.00	0.00
Transect 10	0.00
Substrate:	0.00
Gravel, cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
n/a	0.00
Channel Width:	0.00
n/a	0.00
0.00	0.00
Transect 11	0.00
Substrate:	0.00
Gravel, cobble	0.00
Water Clarity:	0.00
n/a	0.00
Channel Feature:	0.00
n/a	0.00
Channel Width:	0.00
n/a	0.00
0.00	0.00

Site Median	0.05	Site Maximum	0.50
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WBID# 0747



Site# 1 Photo ID# 149, Upstream



Site# 1 Photo ID# 148, Downstream



Site# 2 Photo ID# 151, Upstream



Site# 2 Photo ID# 150, Downstream

WBID# 0747



Site# 3 Photo ID# 153, Upstream



Site# 3 Photo ID# 152, Downstream