

Use Attainability Analysis

for

WBID 1475 Brush Creek

Submitted by
SES Inc.

to

Missouri Department of Natural Resources
Water Protection Program

Date received: June 4, 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: Brush Creek	WBID: 1475
8 digit HUC code: 10290201	County: Laclede
Upstream Legal Description 33N 16W 32	
Downstream Legal Description 33N 16W 27	
Number of Sites Evaluated 3	
List all site numbers, listed upstream to downstream	3,2,1

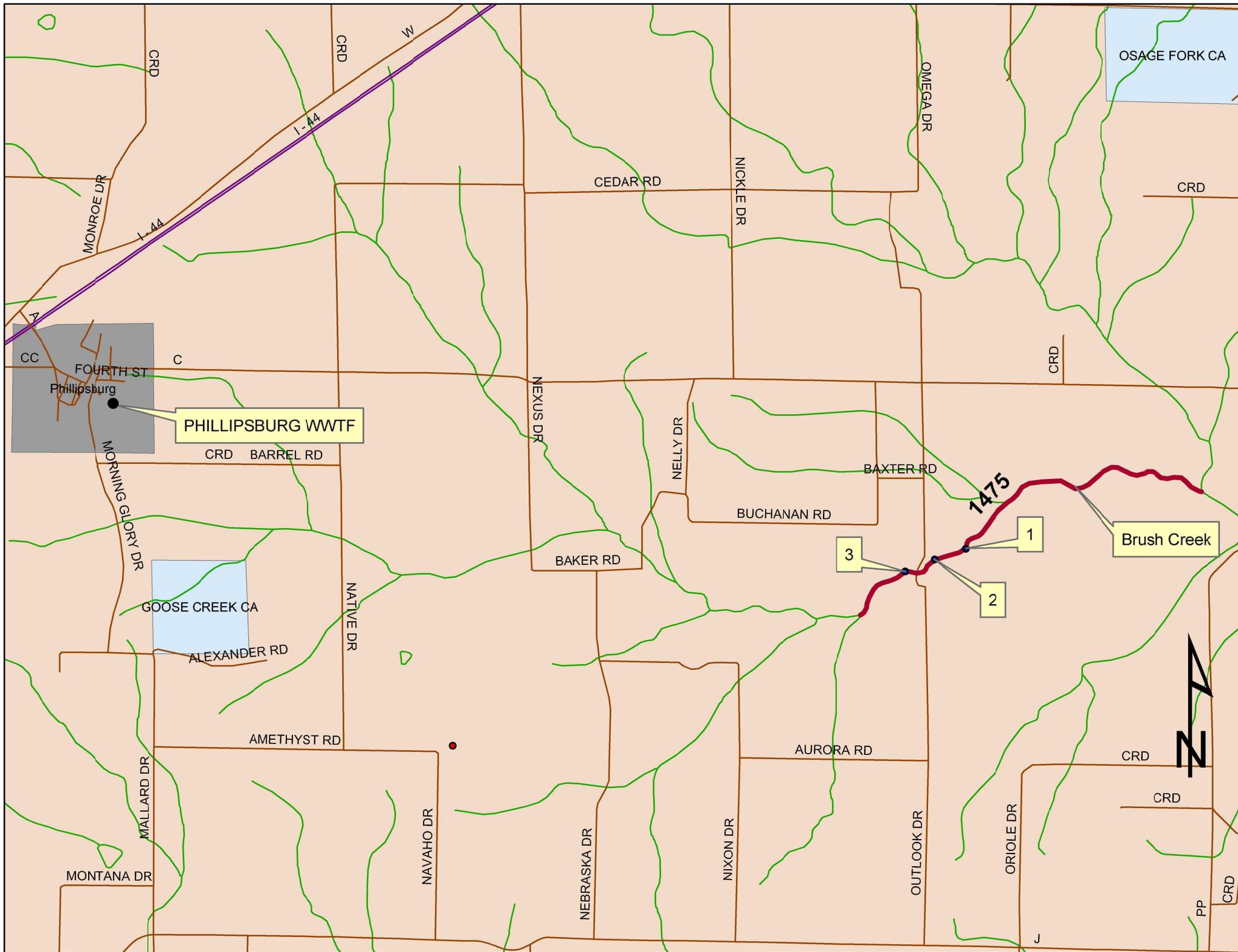
Discharger Facility Information

Discharger Facility Name(s): Phillipsburg WWTF
Discharger Permit Number(s): MO0125237

UAA Surveyor

Name of Surveyor: Nolan Pringle	Telephone Number: (913)307-0046
Organization/Employer: SES, Inc.	
Position: Field Team Leader	

Signed: _____ Date: _____



PHILLIPSBURG WWTF

Brush Creek

3

2

1

1475



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

WBID 1475
Site # 1

Date and Time: 5/19/2007 9:30

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: 1.72 inches total rainfall

Drought Conditions? No

Site Location (e.g. road crossing) 800 yards upstream

GPS Mark: 30

Upstream Photo 60 Downstream Photo 59

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

WBID # 1475 **Site #** 1
Mark # 30 **Dissolved Oxygen (ppm)** N/A
Upstream Views Physical Dimensions: Is there any water present at this view? no
 If so, is there an obvious current? no

Select one of the following channel features:

	% of Channel Feature				
Riffle	0				
Run	0				
Pool	0				

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

Substrate:

% Cobble	% Gravel	% Sand	% Silt
40	40	0	10
% Mud/Clay	% Bedrock		
0	10		

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

Heavy vegetation in stream beds. Algae on rocks and in pools. No floating algae in pools. Vegetation along banks.

Water Characteristics

Odor Sewage Musky Chemical **None** Other
 Color Clear Green Gray Milky **Other: none**
 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 # 30

	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/cobble	0.00	gravel/cobble	0.00	gravel/cobble	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
	0.00		0.00		0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
	0.00		0.00		0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
	0.00		0.00		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/cobble	0.00	gravel/cobble	0.00	bedrock	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
	0.00		0.00		0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
	0.00		0.00		0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
	0.00		0.00		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/cobble	0.00	gravel/cobble	0.00	gravel/cobble/silt	0.00
Water Clarity:	0.00	Water Clarity:	0.00	Water Clarity:	0.00
	0.00		0.00		0.00
Channel Feature:	0.00	Channel Feature:	0.00	Channel Feature:	0.00
	0.00		0.00		0.00
Channel Width:	0.00	Channel Width:	0.00	Channel Width:	0.00
	0.00		0.00		0.00
0.00	0.00	0.00	0.00	0.00	0.00
Transect 4	0.00	Transect 8	0.00		
Substrate:	0.00	Substrate:	0.00		
gravel/cobble	0.00	gravel/cobble	0.00		
Water Clarity:	0.00	Water Clarity:	0.00		
	0.00		0.00		
Channel Feature:	0.00	Channel Feature:	0.00		
	0.00		0.00		
Channel Width:	0.00	Channel Width:	0.00		
	0.00		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 1475
Site # 2

Date and Time: 5/19/2007 10:00

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: 1.72 inches total rainfall

Drought Conditions? No

Site Location (e.g. road crossing) 300 yards upstream

GPS Mark: 31

Upstream Photo 61 Downstream Photo 62

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 # 31

	Depth (m)
Transect 1	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 2	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 3	0.05
Substrate:	0.05
bedrock/silt/cobble/	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.15
pool	0.15
Channel Width:	0.10
6 yards	0.10
0.10	0.10
Transect 4	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00

	Depth (m)
Transect 5	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 6	0.00
Substrate:	0.00
cobble/silt/gravel	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 7	0.00
Substrate:	0.00
cobble/silt/gravel	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 8	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00

	Depth (m)
Transect 9	0.00
Substrate:	0.00
cobble/gravel/silt	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 10	0.00
Substrate:	0.00
cobble/silt/gravel	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	0.00
	0.00
0.00	0.00
Transect 11	0.00
Substrate:	0.00
cobble/silt/gravel	0.00
Water Clarity:	0.00
	0.00
Channel Feature:	0.00
	0.00
Channel Width:	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 1475
Site # 3

Date and Time: 5/19/2007 10:30

Current Weather Conditions sunny, clear

Weather Conditions for Past 10 days: 1.72 inches total rainfall

Drought Conditions? No

Site Location (e.g. road crossing) 50 yards upstream of crossing, working downstream past crossing

GPS Mark: 32

Upstream Photo 64 Downstream Photo 63

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 # 32

	Depth (m)
Transect 1	0.05
Substrate:	0.05
gravel/cobble/silt	0.10
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.20
pool	0.20
Channel Width:	0.15
3 yards	0.15
0.15	0.05
Transect 2	0.20
Substrate:	0.20
gravel/cobble	0.20
Water Clarity:	0.25
clear	0.25
Channel Feature:	0.30
pool	0.30
Channel Width:	0.35
12 yards	0.40
0.25	0.25
Transect 3	0.10
Substrate:	0.10
gravel/cobble	0.05
Water Clarity:	0.00
clear	0.15
Channel Feature:	0.50
pool	0.50
Channel Width:	0.45
24 yards	0.45
0.23	0.30
Transect 4	0.05
Substrate:	0.10
gravel/silt	0.20
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.20
pool	0.30
Channel Width:	0.20
12 yards	0.20
0.20	0.20

	Depth (m)
Transect 5	0.25
Substrate:	0.25
cobble/gravel/silt	0.20
Water Clarity:	0.25
clear	0.25
Channel Feature:	0.30
pool	0.30
Channel Width:	0.25
8 yards	0.25
0.25	0.10
Transect 6	0.10
Substrate:	0.20
silt/gravel	0.25
Water Clarity:	0.25
clear	0.30
Channel Feature:	0.30
pool	0.30
Channel Width:	0.35
7 yards	0.35
0.28	0.25
Transect 7	0.50
Substrate:	0.55
silt/gravel	0.40
Water Clarity:	0.30
murky	0.15
Channel Feature:	0.00
pool	0.00
Channel Width:	0.20
18 yards	0.30
0.25	0.15
Transect 8	0.20
Substrate:	0.40
gravel/cobble/silt	0.45
Water Clarity:	0.45
clear to murky	0.40
Channel Feature:	0.50
pool	0.55
Channel Width:	0.50
13 yards	0.40
0.43	0.35

	Depth (m)
Transect 9	0.20
Substrate:	0.35
silt/gravel	0.60
Water Clarity:	0.60
murky	0.75
Channel Feature:	0.70
pool	0.55
Channel Width:	0.40
13 yards	0.35
0.48	0.35
Transect 10	0.25
Substrate:	0.25
gravel/silt	0.40
Water Clarity:	0.45
murky	0.40
Channel Feature:	0.55
pool	0.50
Channel Width:	0.60
11 yards	0.35
0.40	0.35
Transect 11	0.35
Substrate:	0.35
silt/gravel	0.50
Water Clarity:	0.50
murky to clear	0.40
Channel Feature:	0.25
pool	0.25
Channel Width:	0.20
9 yards	0.20
0.30	0.20

WBID# 1475



Site# 1 Photo ID# 60, Upstream



Site# 1 Photo ID# 59, Downstream



Site# 2 Photo ID# 61, Upstream



Site# 2 Photo ID# 62, Downstream

WBID# 1475



Site# 3 Photo ID# 64, Upstream



Site# 3 Photo ID# 63, Downstream