



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0993 Blythes 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: Blythes	WBID: 993
8 digit HUC code: 10300102	County: Miller
Upstream Legal Description 42N 15W 34	
Downstream Legal Description 43N 14W 31	
Number of Sites Evaluated 4	
List all site numbers, listed upstream to downstream	4,3,2,1

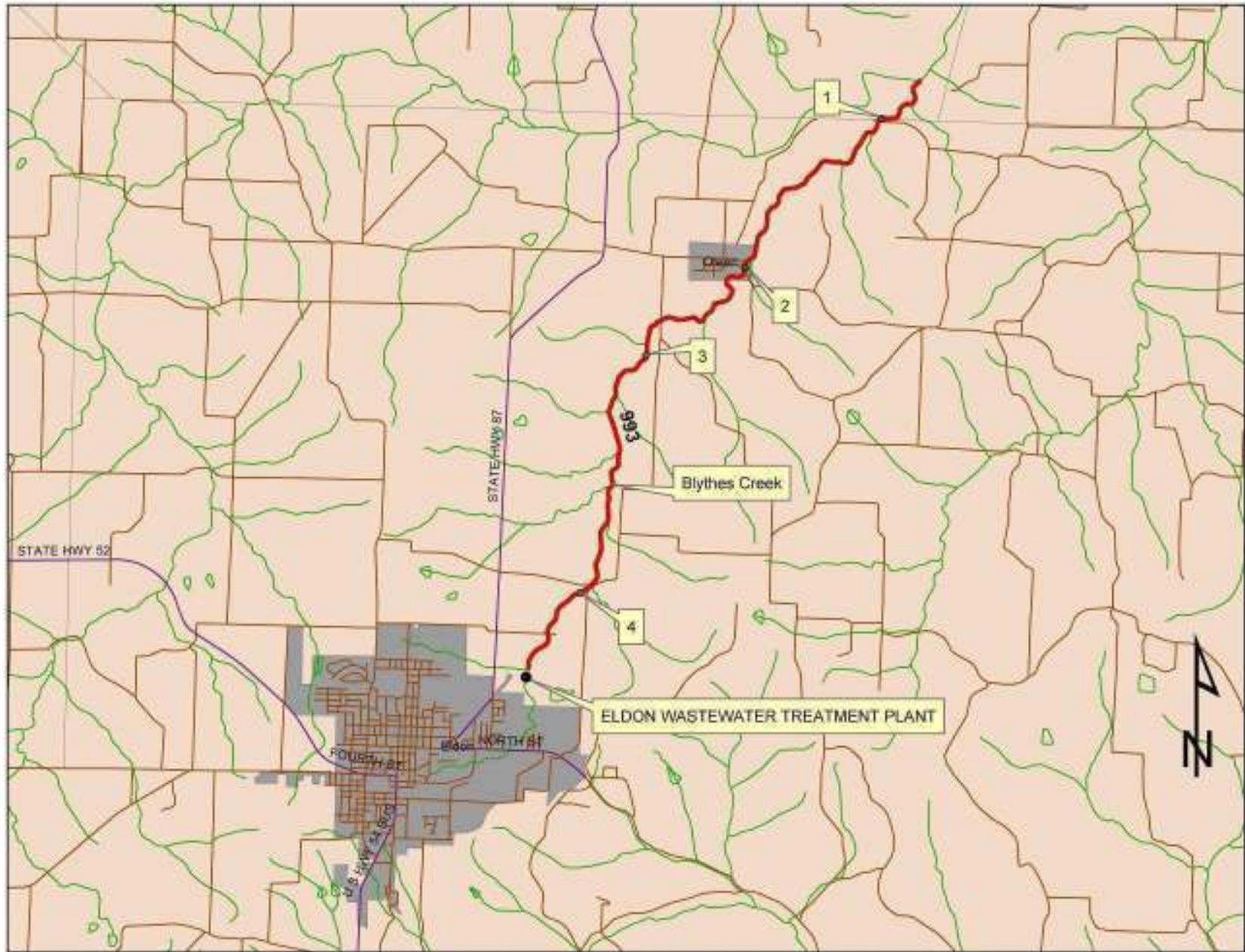
Discharger Facility Information

Discharger Facility Name(s): Eldon WWTP
Discharger Permit Number(s): MO0100676

UAA Surveyor

Name of Surveyor: Gilisa Gould	Telephone Number: (913)307-0054 Ext. 19
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 993
 Site # 1

Date and Time: 5/17/2007 16:37

Current Weather Conditions clear

Weather Conditions for Past 10 days: Rained on 5/6, 5/10, and 5/15; 1 inch total

Drought Conditions? No

Site Location (e.g. road crossing) crossing on Shaw Rd.

GPS Mark: 41

Upstream Photo 91 Downstream Photo 90

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 See Picture #89	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 # 1

Mark # 41

0993_Blythes Creek_MillerMoniteau

	Depth (m)
Transect 1	0.00
Substrate:	0.05
cobble	0.05
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.00
pool	0.05
Channel Width:	0.20
10 yards	0.25
0.05	0.45
Transect 2	0.00
Substrate:	0.05
cobble	0.05
Water Clarity:	0.15
clear	0.15
Channel Feature:	0.20
riffle	0.15
Channel Width:	0.10
8 yards	0.10
0.10	0.00
Transect 3	0.00
Substrate:	0.05
cobble	0.05
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.15
riffle	0.15
Channel Width:	0.10
6 yards	0.10
0.10	0.05
Transect 4	0.00
Substrate:	0.10
cobble/gravel	0.10
Water Clarity:	0.05
clear	0.05
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
10 yards	0.10
0.05	0.05

	Depth (m)
Transect 5	0.05
Substrate:	0.15
gravel	0.15
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.10
riffle	0.20
Channel Width:	0.20
4 yards	0.05
0.10	0.00
Transect 6	0.05
Substrate:	0.15
gravel on clay	0.25
Water Clarity:	0.25
clear	0.20
Channel Feature:	0.15
pool	0.20
Channel Width:	0.20
10 yards	0.20
0.20	0.20
Transect 7	0.10
Substrate:	0.20
gravel	0.30
Water Clarity:	0.45
clear	0.60
Channel Feature:	0.60
pool	0.65
Channel Width:	0.75
10 yards	0.65
0.55	0.50
Transect 8	0.15
Substrate:	0.25
sand	0.50
Water Clarity:	0.60
clear	0.60
Channel Feature:	0.65
pool	0.65
Channel Width:	0.55
10yards	0.55
0.55	0.40

	Depth (m)
Transect 9	0.00
Substrate:	0.10
sand	0.15
Water Clarity:	0.20
clear	0.25
Channel Feature:	0.30
pool	0.30
Channel Width:	0.25
13 yards	0.05
0.23	0.30
Transect 10	0.05
Substrate:	0.15
gravel	0.15
Water Clarity:	0.00
clear	0.00
Channel Feature:	0.10
pool	0.15
Channel Width:	0.15
12 yards	0.20
0.15	0.15
Transect 11	0.05
Substrate:	0.10
sand/cobble/gravel	0.25
Water Clarity:	0.30
clear	0.35
Channel Feature:	0.40
pool	0.45
Channel Width:	0.50
7 yards	0.45
0.33	0.10

Site Median	Site Maximum
0.15	0.75

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

WBID 993
Site # 2

Date and Time: 5/17/2007 17:27

Current Weather Conditions clear

Weather Conditions for Past 10 days: Rained on 5/6, 5/10, and 5/15; 1 inch total

Drought Conditions? No

Site Location (e.g. road crossing) Main street crossing

GPS Mark: 42

Upstream Photo 93 Downstream Photo 92

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 # 42

0993_Blythes Creek_MillerMoniteau

	Depth (m)
Transect 1	0.15
Substrate:	0.15
gravel/bedrock	0.30
Water Clarity:	0.35
clear	0.40
Channel Feature:	0.35
pool	0.20
Channel Width:	0.15
6 yards	0.10
0.18	0.10
Transect 2	0.05
Substrate:	0.15
gravel/bedrock	0.20
Water Clarity:	0.25
clear	0.25
Channel Feature:	0.20
pool	0.30
Channel Width:	0.20
6 yards	0.20
0.20	0.10
Transect 3	0.10
Substrate:	0.20
gravel/bedrock	0.20
Water Clarity:	0.15
clear	0.15
Channel Feature:	0.15
pool	0.10
Channel Width:	0.10
6 yards	0.15
0.15	0.05
Transect 4	0.00
Substrate:	0.10
cobble/gravel	0.15
Water Clarity:	0.20
clear	0.25
Channel Feature:	0.30
run	0.35
Channel Width:	0.30
3 yards	0.25
0.23	0.20

	Depth (m)
Transect 5	0.00
Substrate:	0.05
cobble/gravel	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.05
run	0.15
Channel Width:	0.20
7 yards	0.15
0.10	0.10
Transect 6	0.25
Substrate:	0.25
gravel/bedrock	0.40
Water Clarity:	0.35
clear	0.35
Channel Feature:	0.40
pool	0.35
Channel Width:	0.30
8 yards	0.20
0.33	0.05
Transect 7	0.05
Substrate:	0.15
gravel/bedrock	0.25
Water Clarity:	0.30
clear	0.35
Channel Feature:	0.30
run	0.30
Channel Width:	0.25
5 yards	0.30
0.30	0.30
Transect 8	0.00
Substrate:	0.00
cobble/gravel	0.05
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.10
rifle	0.10
Channel Width:	0.15
4 yards	0.10
0.10	0.10

	Depth (m)
Transect 9	0.00
Substrate:	0.05
cobble/gravel	0.15
Water Clarity:	0.20
clear	0.25
Channel Feature:	0.25
pool	0.30
Channel Width:	0.30
4 yards	0.30
0.23	0.15
Transect 10	0.00
Substrate:	0.00
gravel/cobble	0.00
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.15
pool	0.20
Channel Width:	0.15
5 yards	0.10
0.10	0.05
Transect 11	0.05
Substrate:	0.05
gravel cobble	0.10
Water Clarity:	0.05
clear	0.00
Channel Feature:	0.05
pool	0.25
Channel Width:	0.35
11 yards	0.30
0.08	0.25
Site Median	0.15
Site Maximum	0.40

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

WBID 993
Site # 3

Date and Time: 5/17/2007 18:45

Current Weather Conditions clear

Weather Conditions for Past 10 days: Rained on 5/6, 5/10, and 5/15; 1 inch total

Drought Conditions? No

Site Location (e.g. road crossing) Northgate crossing

GPS Mark: 43

Upstream Photo 94 Downstream Photo 95

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 # 43

0993_Blythes Creek_MillerMoniteau

	Depth (m)
Transect 1	0.05
Substrate:	0.05
gravel	0.10
Water Clarity:	0.10
clear	0.25
Channel Feature:	0.25
pool	0.20
Channel Width:	0.30
9 yards	0.25
0.15	0.10
Transect 2	0.05
Substrate:	0.00
bedrock/grave	0.20
Water Clarity:	0.30
clear	0.25
Channel Feature:	0.30
pool	0.10
Channel Width:	0.15
12 yards	0.15
0.15	0.05
Transect 3	0.10
Substrate:	0.15
cobble/gravel/bedrock	0.25
Water Clarity:	0.25
clear	0.25
Channel Feature:	0.25
pool	0.15
Channel Width:	0.10
8 yards	0.05
0.15	0.00
Transect 4	0.00
Substrate:	0.05
cobble	0.10
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.15
riffle	0.15
Channel Width:	0.15
9 yards	0.20
0.15	0.20

	Depth (m)
Transect 5	0.00
Substrate:	0.05
cobble	0.05
Water Clarity:	0.05
clear	0.00
Channel Feature:	0.00
riffle	0.00
Channel Width:	0.00
11 yards	0.15
0.03	0.10
Transect 6	0.00
Substrate:	0.60
gravel/cobble	0.00
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.30
run	0.40
Channel Width:	0.20
8 yards	0.10
0.13	0.10
Transect 7	0.00
Substrate:	0.05
gravel/bedrock	0.05
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.20
riffle	0.10
Channel Width:	0.05
7 yards	0.10
0.10	0.10
Transect 8	0.00
Substrate:	0.00
gravel/bedrock	0.10
Water Clarity:	0.15
clear	0.05
Channel Feature:	0.05
riffle	0.05
Channel Width:	0.00
7 yards	0.05
0.05	0.05

	Depth (m)
Transect 9	0.10
Substrate:	0.10
gravel/bedrock	0.05
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.30
pool	0.30
Channel Width:	0.15
8 yards	0.00
0.13	0.05
Transect 10	0.05
Substrate:	0.00
gravel/bedrock	0.05
Water Clarity:	0.15
clear	0.15
Channel Feature:	0.10
riffle	0.00
Channel Width:	0.10
9 yards	0.10
0.08	0.05
Transect 11	0.05
Substrate:	0.15
bedrock/sand	0.20
Water Clarity:	0.05
clear	0.00
Channel Feature:	0.05
riffle	0.05
Channel Width:	0.00
6 yards	0.00
0.05	0.00
Site Median	0.10
Site Maximum	0.60

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

WBID 993
 Site # 4

Date and Time: 5/17/2007 19:24

Current Weather Conditions clear

Weather Conditions for Past 10 days: Rained on 5/6, 5/10, and 5/15; 1 inch total

Drought Conditions? No

Site Location (e.g. road crossing) Crossing on North Ridge

GPS Mark: 44

Upstream Photo 96 Downstream Photo 97

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 # 4

Mark # 44

0993_Blythes Creek_MillerMoniteau

	Depth (m)		Depth (m)		Depth (m)
Transect 1	0.10	Transect 5	0.00	Transect 9	0.00
Substrate:	0.15	Substrate:	0.05	Substrate:	0.05
bedrock/gravel	0.20	gravel	0.05	cobble/gravel	0.05
Water Clarity:	0.15	Water Clarity:	0.10	Water Clarity:	0.05
clear	0.00	clear	0.05	clear	0.10
Channel Feature:	0.05	Channel Feature:	0.10	Channel Feature:	0.10
pool	0.05	riffle	0.15	riffle	0.10
Channel Width:	0.10	Channel Width:	0.10	Channel Width:	0.05
6 yards	0.10	5 yards	0.05	7 yards	0.05
0.10	0.05	0.05	0.00	0.05	0.00
Transect 2	0.05	Transect 6	0.05	Transect 10	0.00
Substrate:	0.10	Substrate:	0.10	Substrate:	0.05
bedrock/gravel	0.10	bedrock	0.10	gravel	0.15
Water Clarity:	0.15	Water Clarity:	0.10	Water Clarity:	0.25
clear	0.20	clear	0.15	clear	0.35
Channel Feature:	0.25	Channel Feature:	0.10	Channel Feature:	0.30
run	0.20	riffle	0.10	pool	0.40
Channel Width:	0.10	Channel Width:	0.10	Channel Width:	0.35
5 yards	0.05	5 yards	0.10	7 yards	0.30
0.10	0.05	0.10	0.10	0.28	0.15
Transect 3	0.00	Transect 7	0.00	Transect 11	0.10
Substrate:	0.10	Substrate:	0.05	Substrate:	0.20
bedrock/gravel	0.15	bedrock	0.05	gravel	0.30
Water Clarity:	0.15	Water Clarity:	0.10	Water Clarity:	0.45
clear	0.10	clear	0.05	clear	0.45
Channel Feature:	0.10	Channel Feature:	0.05	Channel Feature:	0.50
riffle	0.00	riffle	0.05	pool	0.50
Channel Width:	0.05	Channel Width:	0.05	Channel Width:	0.60
5 yards	0.00	4 yards	0.05	8 yards	0.50
0.10	0.10	0.05	0.05	0.45	0.20
Transect 4	0.00	Transect 8	0.00	Site Median	0.10
Substrate:	0.05	Substrate:	0.05	Site Maximum	0.60
bedrock/gravel	0.05	gravel	0.10		
Water Clarity:	0.10	Water Clarity:	0.05		
clear	0.00	clear	0.10		
Channel Feature:	0.05	Channel Feature:	0.10		
riffle	0.10	riffle	0.10		
Channel Width:	0.20	Channel Width:	0.05		
5 yards	0.15	7 yards	0.10		
0.08	0.10	0.08	0.05		

WBID# 993



Site# 1 Photo ID# 91, Upstream



Site# 1 Photo ID# 90, Downstream



Site# 1 Photo ID# 89, Roads

WBID# 993



Site# 2 Photo ID# 93, Upstream



Site# 2 Photo ID# 92, Downstream



Site# 3 Photo ID# 94, Upstream



Site# 3 Photo ID# 95, Downstream

WBID# 993



Site# 4 Photo ID# 96, Upstream



Site# 4 Photo ID# 97, Downstream