



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0721 Collier 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:	East Wing/Collier	WBID:	721
8 digit HUC code:	10300102	County:	Callaway
Upstream Legal Description	T45N	R8W	Sec18
Downstream Legal Description	T45N	R8W	Sec9
Number of Sites Evaluated	3		
List all site numbers, listed upstream to downstream			
	3	1	2

Discharger Facility Information

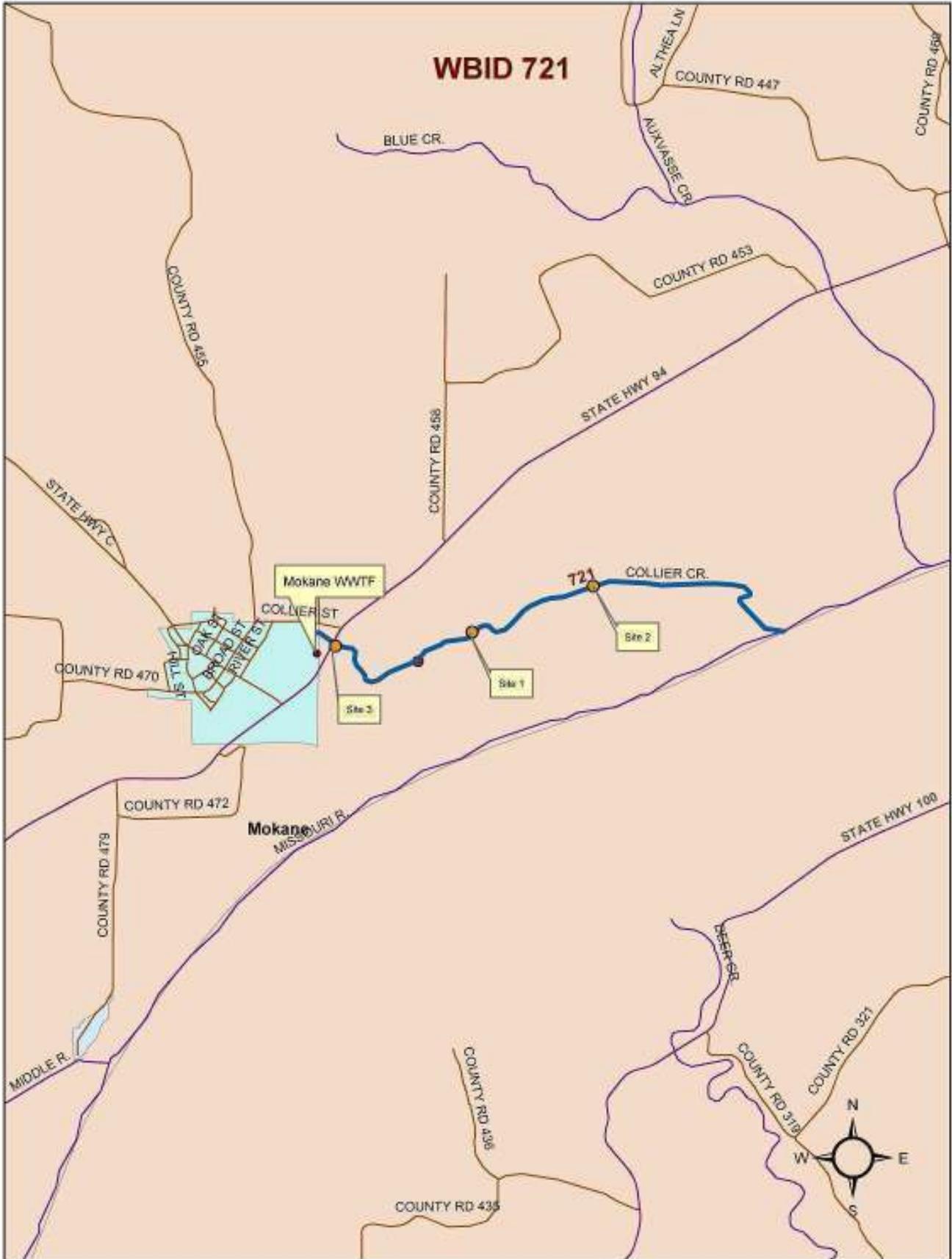
Discharger Facility Name(s):	MOKANE WWTF
Discharger Permit Number(s):	MO01062 75

UAA Surveyor

Name of Surveyor:	Aaron Ball	Telephone Number:	913.307.3354, Ext.14
Organization/Employer:	SES, Inc.		
Position:	Field Team Leader		

Signed: _____ Date: _____

WBID 721



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

WBID 721
 Site # 1

Date and Time: 8.02.07 8:20am

Current Weather Conditions clear

Weather Conditions for Past 10 days: clear

Drought Conditions? No

Site Location (e.g. road crossing) between sites #2 and #3

GPS Mark: 18

Upstream Photo 2 Downstream Photo 1

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 # 1

Mark # 18

WBID# 721

	Depth (m)
Transect 1	0.05
Substrate:	0.05
silt	0.05
Water Clarity:	0.05
clear	0.10
Channel Feature:	0.10
pool	0.05
Channel Width:	0.05
5 yards	0.05
0.05	0.05
Transect 2	0.10
Substrate:	0.10
silt	0.05
Water Clarity:	0.20
clear	0.20
Channel Feature:	0.25
pool	0.25
Channel Width:	0.25
5 yards	0.20
0.20	0.20
Transect 3	0.05
Substrate:	0.10
silt	0.20
Water Clarity:	0.25
clear	0.30
Channel Feature:	0.30
pool	0.25
Channel Width:	0.30
6 yards	0.25
0.25	0.25
Transect 4	0.15
Substrate:	0.20
silt	0.30
Water Clarity:	0.30
clear	0.30
Channel Feature:	0.25
pool	0.25
Channel Width:	0.20
4 yards	0.15
0.23	0.05

	Depth (m)
Transect 5	0.05
Substrate:	0.10
silt	0.20
Water Clarity:	0.20
clear	0.25
Channel Feature:	0.30
pool	0.30
Channel Width:	0.30
5 yards	0.25
0.23	0.15
Transect 6	0.05
Substrate:	0.10
silt	0.15
Water Clarity:	0.15
clear	0.20
Channel Feature:	0.20
pool	0.15
Channel Width:	0.15
5 yards	0.10
0.15	0.05
Transect 7	0.05
Substrate:	0.05
silt	0.05
Water Clarity:	0.10
clear	0.15
Channel Feature:	0.16
pool	0.10
Channel Width:	0.05
5 yards	0.05
0.05	0.05
Transect 8	0.05
Substrate:	0.10
silt	0.10
Water Clarity:	0.10
clear	0.10
Channel Feature:	0.10
pool	0.10
Channel Width:	0.10
5 yards	0.10
0.10	0.10

	Depth (m)	
Transect 9	0.05	
Substrate:	0.10	
silt	0.10	
Water Clarity:	0.10	
clear	0.10	
Channel Feature:	0.05	
pool	0.10	
Channel Width:	0.05	
5 yards	0.05	
0.08	0.05	
Transect 10	0.05	
Substrate:	0.10	
silt	0.20	
Water Clarity:	0.20	
clear	0.20	
Channel Feature:	0.20	
pool	0.20	
Channel Width:	0.15	
5 yards	0.10	
0.18	0.05	
Transect 11	0.05	
Substrate:	0.05	
silt	0.10	
Water Clarity:	0.10	
clear	0.10	
Channel Feature:	0.10	
pool	0.15	
Channel Width:	0.10	
5 yards	0.10	
0.10	0.10	
Site Median	0.10	Site Maximum
		0.30

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

WBID 721
 Site # 2

Date and Time: 8.02.07 8:55am

Current Weather Conditions clear

Weather Conditions for Past 10 days: clear

Drought Conditions? No

Site Location (e.g. road crossing) downstream site #1

GPS Mark: 19

Upstream Photo 4 Downstream Photo 3

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 # 19

WBID# 721

	Depth (m)
Transect 1	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 2	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 3	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 4	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00

	Depth (m)
Transect 5	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 6	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 7	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00
Transect 8	1.00
Substrate:	1.00
silt	1.00
Water Clarity:	1.00
none	1.00
Channel Feature:	1.00
pool	1.00
Channel Width:	1.00
8 yards	1.00
1.00	1.00

	Depth (m)	
Transect 9	1.00	
Substrate:	1.00	
silt	1.00	
Water Clarity:	1.00	
none	1.00	
Channel Feature:	1.00	
pool	1.00	
Channel Width:	1.00	
8 yards	1.00	
1.00	1.00	
Transect 10	1.00	
Substrate:	1.00	
silt	1.00	
Water Clarity:	1.00	
none	1.00	
Channel Feature:	1.00	
pool	1.00	
Channel Width:	1.00	
8 yards	1.00	
1.00	1.00	
Transect 11	1.00	
Substrate:	1.00	
silt	1.00	
Water Clarity:	1.00	
none	1.00	
Channel Feature:	1.00	
pool	1.00	
Channel Width:	1.00	
8 yards	1.00	
1.00	1.00	
Site Median	1.00	Site Maximum
		1.00

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

WBID 721
 Site # 3

Date and Time: 8.02.07 10:00am

Current Weather Conditions clear

Weather Conditions for Past 10 days: clear

Drought Conditions? No

Site Location (e.g. road crossing) Hwy 94

GPS Mark: 20

Upstream Photo 5 Downstream Photo 6

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 # 3

Mark # 20

WBID# 721

	Depth (m)
Transect 1	0.05
Substrate:	0.10
silt	0.10
Water Clarity:	0.05
none	0.05
Channel Feature:	0.10
pool	0.10
Channel Width:	0.10
3 yards	0.10
0.10	0.05
Transect 2	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
3 yards	0.00
0.00	0.00
Transect 3	0.10
Substrate:	0.10
silt	0.10
Water Clarity:	0.10
none	0.10
Channel Feature:	0.10
pool	0.10
Channel Width:	0.10
3 yards	0.05
0.10	0.05
Transect 4	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
none	0.00
Channel Feature:	0.00
pool	0.00
Channel Width:	0.00
4 yards	0.00
0.00	0.00

	Depth (m)
Transect 5	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
4 yards	0.00
0.00	0.00
Transect 6	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
5 yards	0.00
0.00	0.00
Transect 7	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
2 yards	0.00
0.00	0.00
Transect 8	0.00
Substrate:	0.05
silt	0.10
Water Clarity:	0.10
some	0.10
Channel Feature:	0.10
pool	0.10
Channel Width:	0.10
3 yards	0.05
0.10	0.05

	Depth (m)
Transect 9	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
3 yards	0.00
0.00	0.00
Transect 10	0.00
Substrate:	0.00
silt	0.00
Water Clarity:	0.00
N/A	0.00
Channel Feature:	0.00
N/A	0.00
Channel Width:	0.00
3 yards	0.00
0.00	0.00
Transect 11	0.10
Substrate:	0.10
silt	0.15
Water Clarity:	0.15
some	0.15
Channel Feature:	0.20
pool	0.15
Channel Width:	0.15
2 yards	0.10
0.15	0.10
Site Median	0.00
Site Maximum	0.20

WBID# 721



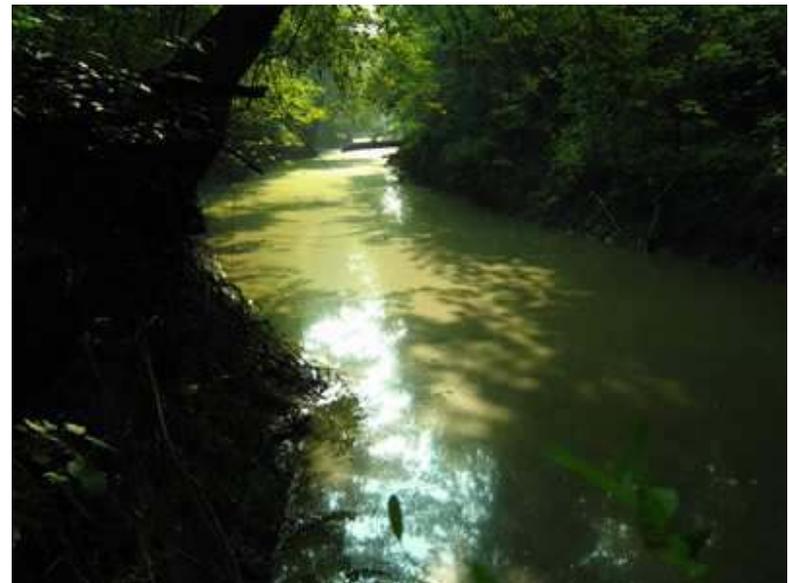
Site# 1 Photo ID# 2, Upstream



Site# 1 Photo ID# 1, Downstream



Site# 2 Photo ID# 4, Upstream



Site# 2 Photo ID# 3, Downstream

WBID# 721



Site# 3 Photo ID# 5, Upstream



Site# 3 Photo ID# 6, Downstream