



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0650 Upper Shoal Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

RECEIVED
JUL 12 2005
WATER PROTECTION PROGRAM

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	Shoal Creek (Upper)
8-digit HUC:	10280201
Missouri WBID #:	0650
County:	Putnam
Upstream Legal Description:	NW ¹ / ₄ , SW ¹ / ₄ , Sec. 5, T 66N, R 17W
Downstream Legal Description:	NE ¹ / ₄ , SW ¹ / ₄ , Sec. 27, T 66N, R 17W
Upstream Coordinates:	40.52779N / 92.83525 W FOM 11.9 Feet
Downstream Coordinates:	40.49039N / 92.801528W FOM 13 ft
Discharger Facility Name(s):	
Discharger Permit Number(s):	
Number of Sites Evaluated:	2 (2 up stream) (1 down stream) (3 total)
Name of Surveyor and Telephone Number:	Dave Dowdy 660-385-7996
Organization:	SWCP
Position:	Soil Scientist III

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: A. Marshans Date: 7-7-05

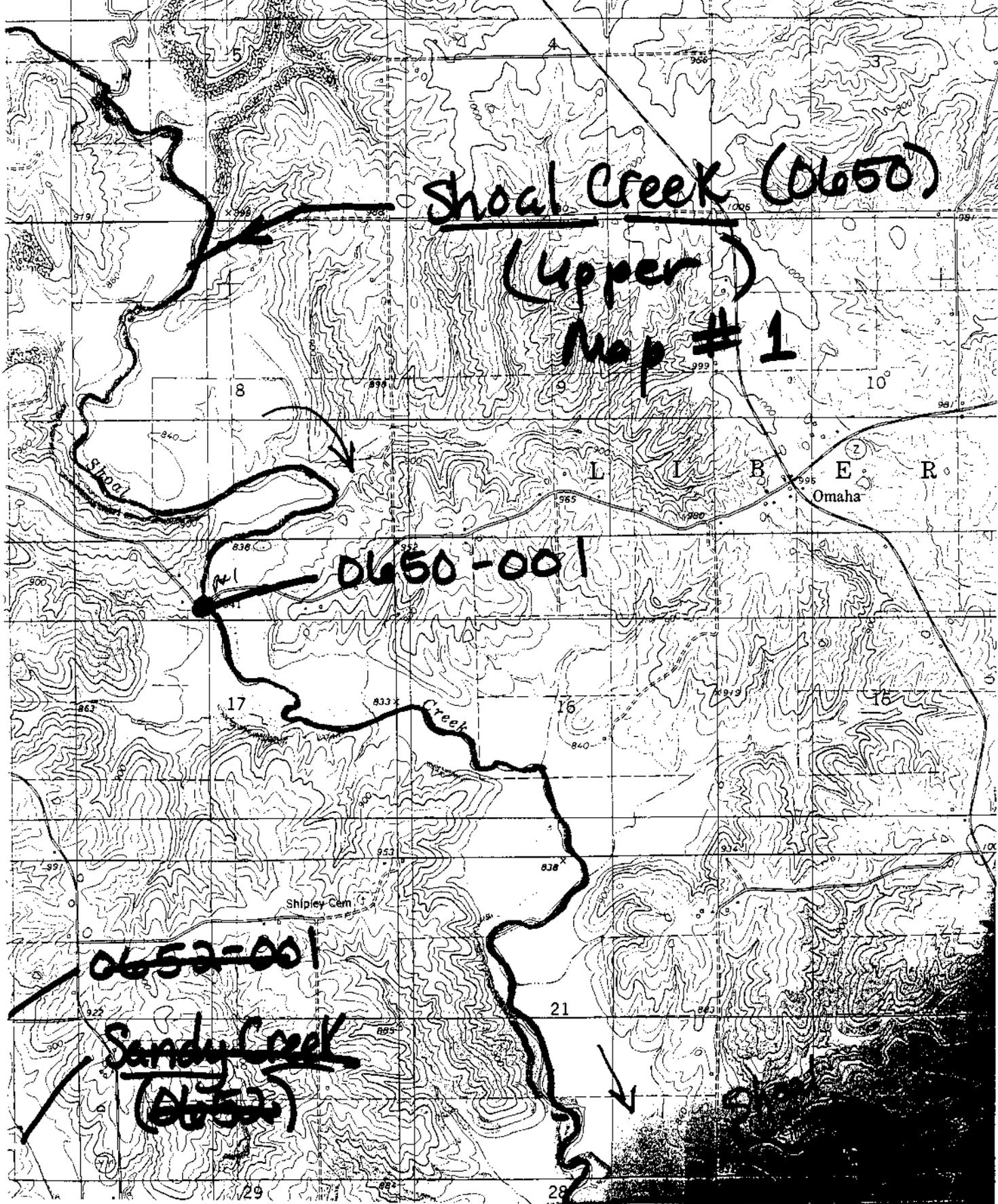
Shoal Creek (0650)

(Upper)
Map # 1

0650-001

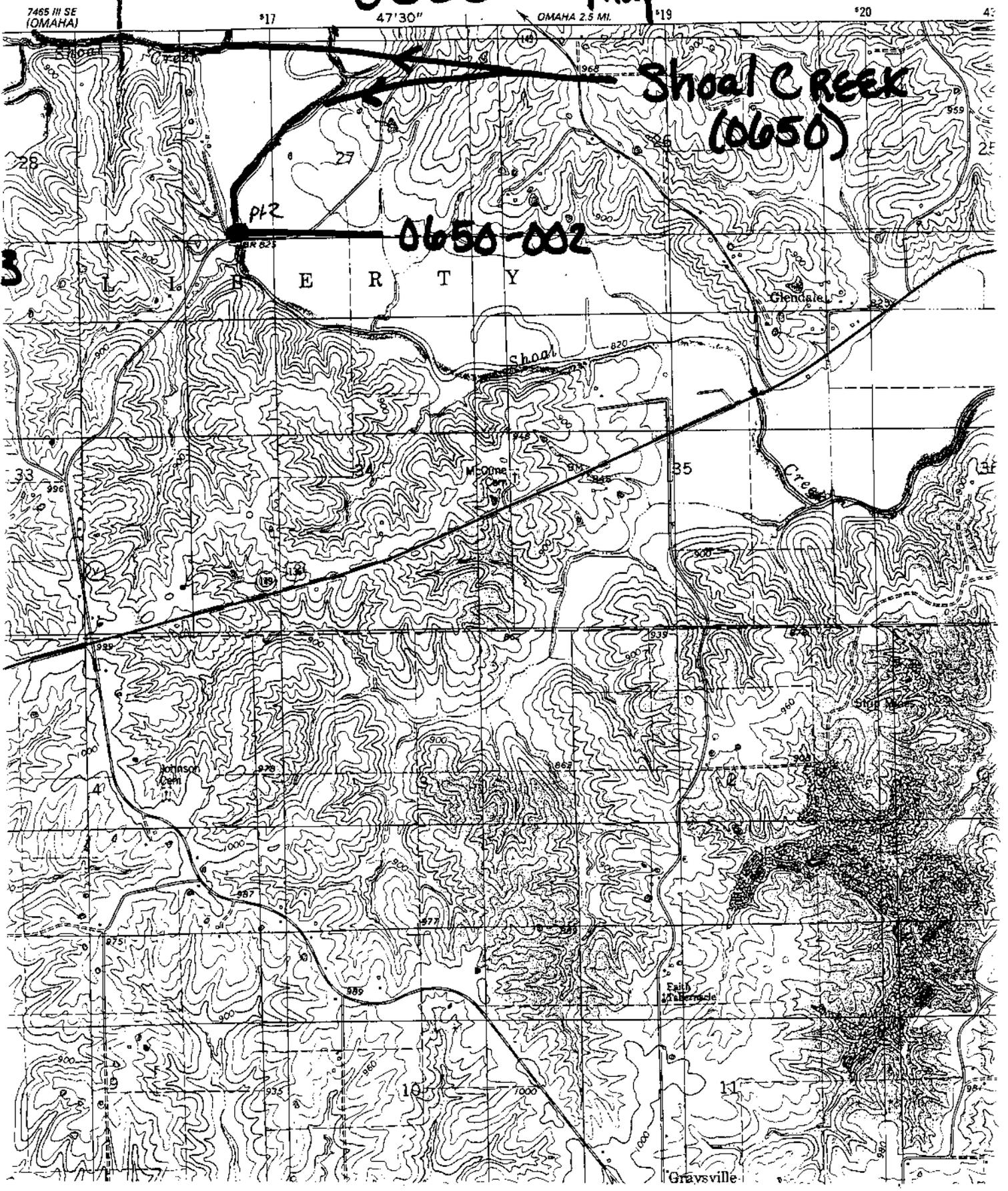
0652-001

Sandy Creek
(0652)



Shoal Cr. (Upper)
0650 Map #2

GRAYSVILLE QUAD
MISSOURI
7.5 MINUTE SERIES (TOP
NE/4 GREEN CITY 15' QUAD)



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization
(A separate data sheet must be completed for each site)

Dave Dandy #
Amber Marshaus
GMA

Missouri WBID #: 0650-1	Site Location Description: Shoal Creek (Upper)	
Site GPS Coordinates: 40.52779N/92.83525W	Facility Name:	
Date & Time: 7-6-01 @ 3:30P	Permit Number:	
Personnel: DD, AM	Weather Conditions for Past 7 days: Some Rain, Hot, Humid	
Current Weather Conditions: Hot, Humid, Pt. Cloudy	Other:	
Photo Ids: Upstream: 0650U1	Downstream: 0650D1	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input checked="" type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <i>Foot path</i> <i>Somewhat wooded around banks</i>	

Evidence of Human Use* → *gravel Rd in Omaha, MO*

<input checked="" type="checkbox"/> Roads <i>Bridge</i>	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <i>Firework trash</i> possible				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0650: -01 *Am*

Run # 2
W: 50
L: 25
Average Depth: 3'
max Depth: 4'

Stream Morphology:

Upstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>20</u>	Length (ft): <u>30</u>	Avg. Depth (ft): <u><0.1</u>	Max. Depth (ft): <u>0.5</u>
<input checked="" type="checkbox"/> Run	Width (ft): <u>35</u>	Length (ft): <u>45</u>	Avg. Depth (ft): <u>3.5</u>	Max. Depth (ft): <u>4</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>6</u>	Length (ft): <u>18</u>	Avg. Depth (ft): <u>1/2'</u>	Max. Depth (ft): <u>1'</u>
<input checked="" type="checkbox"/> Run	Width (ft): <u>35</u>	Length (ft): <u>35</u>	Avg. Depth (ft): <u>2</u>	Max. Depth (ft): <u>4</u>
<input checked="" type="checkbox"/> Pool	Width (ft): <u>6</u>	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

<u>5</u> % Cobble	<u>15</u> % Gravel	<u>40</u> % Sand	<u>40</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Hydric Vegetation, wooded w/ Aquatic trees (on bank)
5% algae in channel

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <i>Clear to light green</i>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: A. Marshaw Date: 7-7-05

Organization: SWCP Position: SSI

0650_001_US



0650_001_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Dave Dowdy &
Amber Marshaus

Missouri WBID #: 0650 D2 (last point)	Site Location Description: Shoal creek (upper)	
Site GPS Coordinates: 40.49039 N 92.8052 W		
Date & Time: 7-6-05 @ 4:20p	Facility Name:	
Personnel: DD, AM	Permit Number:	
Current Weather Conditions: mid 80's clear humid	Weather Conditions for Past 7 days: some rain, hot humid	
Photo Ids: Upstream: 0650U2	Downstream: 0650D2	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use:

<input checked="" type="checkbox"/> Roads Bridges	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0650-02

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>35</u>	Length (ft): <u>85</u>	Avg. Depth (ft): <u>3</u>	Max. Depth (ft): <u>4</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>35</u>	Length (ft): <u>150</u>	Avg. Depth (ft): <u>1.5</u>	Max. Depth (ft): <u>3</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

% Cobble	<u>5</u> % Gravel	<u>60</u> % Sand	<u>35</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>Hydric Plants & grasses. Trees along banks</u> <u>51% Algae in channel</u>
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Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>Clear to lt green</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

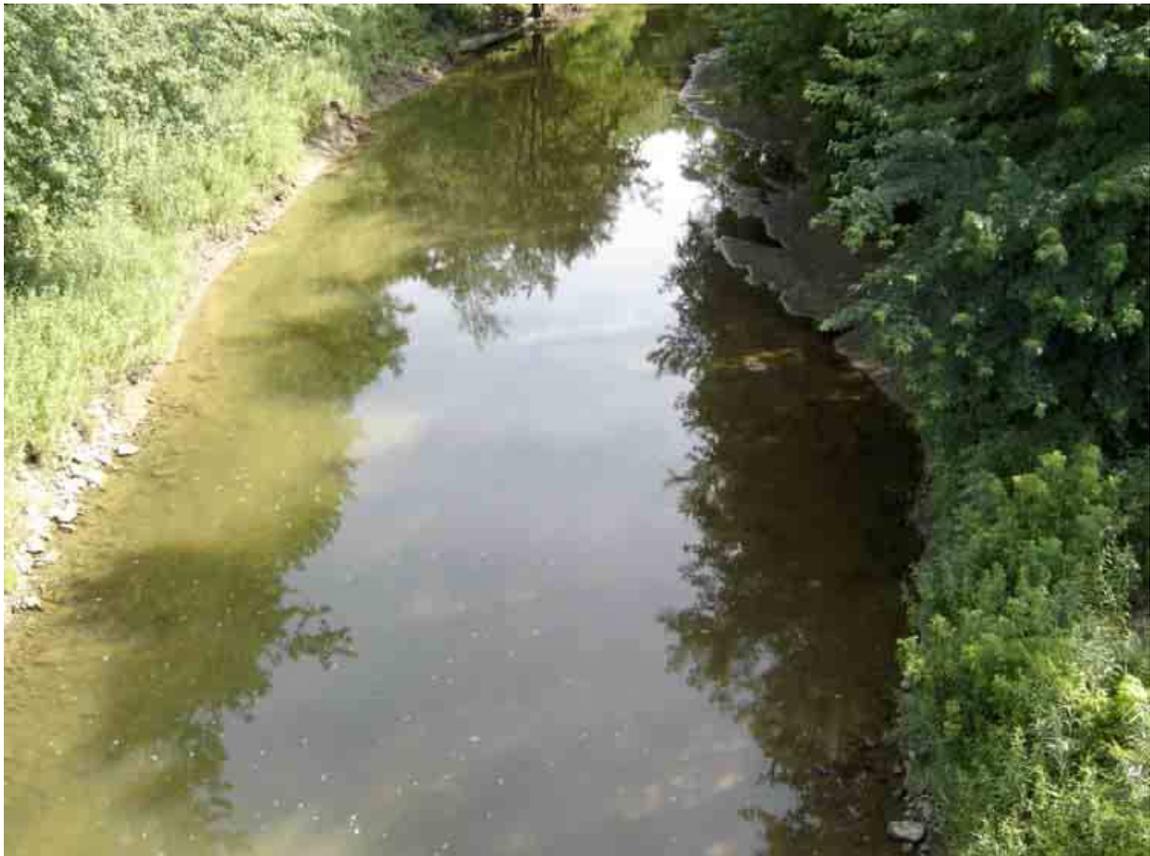
Signed: A. Manshous Date: 7/7/05

Organization: SWCP Position: SSI

0650_002_US



0650_002_DS





Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0650 Lower Shoal Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

RECEIVED
JUL 12 2005
WATER PROTECTION PROGRAM

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	Shoal Creek (Lower)
8-digit HUC:	10280201
Missouri WBID #:	0650
County:	Putnam
Upstream Legal Description:	NW ¹ / ₄ , SW ¹ / ₄ , Sec. 31, T66N, R16W
Downstream Legal Description:	SW ¹ / ₄ , NW ¹ / ₄ , Sec. 4, T65N, R16W
Upstream Coordinates:	N/A
Downstream Coordinates:	40.47146N/92.72548W FOM: 15.5
Discharger Facility Name(s):	
Discharger Permit Number(s):	
Number of Sites Evaluated:	① (Furthest DS.) (2 upstream) (3 total)
Name of Surveyor and Telephone Number:	Dave Dowdy
Organization:	SWCP
Position:	SS III

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: G. Marshall Date: 7-7-05

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 0650-03	Site Location Description: Shoal Creek (Lower)
Site GPS Coordinates: 40° 17' 14" N / 92° 7' 25" W	
Date & Time: 7-6-05 @ 5 pm	Facility Name:
Personnel: DD, AM	Permit Number:
Current Weather Conditions: mid 80's humid, clear	Weather Conditions for Past 7 days: SOME RAIN, HOT, HUMID
Photo Ids: Upstream: 0650U1	Downstream: 0650D1 Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Farmland	

Evidence of Human Use*: *bridge*

<input checked="" type="checkbox"/> Roads Hwy FF	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: Sheds on streambank				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0650 : - 03

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>40</u>	Length (ft): <u>65</u>	Avg. Depth (ft): <u>1.5</u>	Max. Depth (ft): <u>3.5</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):		

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>45</u>	Length (ft): <u>85</u>	Avg. Depth (ft): <u>1.5</u>	Max. Depth (ft): <u>3.5</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):		

Substrate*: (These values should add up to 100%.)

<u>1</u> % Cobble	% Gravel	<u>30</u> % Sand	<u>70</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

possibly from bridge
 hydric plants & trees along bank, grasses

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear to <u>murky</u>	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

Fe deposition on bank, minnows, wild life watering

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Signed: A. Marshans Date: 7-7-05

Organization: SWCP Position: SS - I

0650_003_US



0650_003_DS

