



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0034 Birkhead Branch

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

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	Birkhead Branch
8-digit HUC:	07110004
Missouri WBID #:	0034
County:	Lincoln
Upstream Legal Description:	East border of Sec. 17 T49N R 2W
Downstream Legal Description:	SE 1/4 SE 1/4 Sec. 21 T49N R 2W
Upstream Coordinates:	UTM 690524 4319934
Downstream Coordinates:	UTM 691899 4317716
Discharger Facility Name(s):	
Discharger Permit Number(s):	
Number of Sites Evaluated:	3
Name of Surveyor and Telephone Number:	Tucker Fredrickson (573)526-4210
Organization:	MDNR
Position:	Environmental Specialist

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

Signed: Tucker Fredrickson Date: 5/23/05

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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 #: 0034-01	Site Location Description: Low water bridge	
Site GPS Coordinates: 690524 4319434	OP# 1 crossing County Road 691	
Date & Time: 5/23/05 4:25	Facility Name: Birkhead Branch	
Personnel: Tucker Fredrickson	Permit Number:	
Current Weather Conditions: Sunny 80°F	Weather Conditions for Past 7 days: Approx. 0.5" of rain Temp High - 80°F	
Photo Ids: Upstream: 18	Downstream: 19	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.)				
NA				

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 type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: NA	

Evidence of Human Use*:

<input type="checkbox"/> Roads	<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: NA				

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)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>25</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1</u>	Max. Depth (ft): <u>2.5</u>
<input 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>10</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>0.25</u>	Max. Depth (ft): <u>0.5</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input 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>30</u> % Cobble	<u>30</u> % Gravel	% Sand	% Silt	% Mud/Clay	<u>40</u> % Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Surface coverage - 25% algae periphyton 25% substrate coverage

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 checked="" 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.
Water backing up from stone dam someone built. 50 minnows observed
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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: Jucher Fredrickson Date: 5/23/05

Organization: MDNR Position: ES

0034-01-up



0034-01-ds



Field Data Sheets for Recreational Use Stream Surveys

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

55.6

Missouri WBID #: 0034-02	Site Location Description: Low water bridge crossing		
Site GPS Coordinates: 692061 4318442	OP # 2 County Road 692		
Date & Time: 5/23/05 4:40	Facility Name: Birkhead Branch		
Personnel: Tucker Fredrickson	Permit Number:		
Current Weather Conditions: Sunny 80°F	Weather Conditions for Past 7 days: Approx. 0.5" rain		
Photo Ids: Upstream: 20	Downstream: 21	Other: Temp High 80s	

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.)
NA

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 type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: NA	

Evidence of Human Use*:

<input type="checkbox"/> Roads	<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: NA				

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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Data Sheet B - Site Characterization

Page Two - WBID # 0034

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft): 2.5
<input checked="" type="checkbox"/> Pool	Width (ft): <u>25</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.0</u>	Max. Depth (ft): <u>2.5</u>
<input 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>6</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>0.5</u>	Max. Depth (ft): <u>0.75</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input 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>40</u> % Cobble	<u>50</u> % Gravel	% Sand	<u>10</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae surface coverage 25% periphyton 75% substrate coverage

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 checked="" 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 checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input 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: Jochen Fredrickson Date: 5/23/05

Organization: MDNR Position: ES

0034-02-up



0034-02-ds



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 #: <u>0034-03</u>	Site Location Description: <u>Low water bridge crossing Roffes Lane (Pvt. Drive) OP #3 off Hwy. 47</u>	
Site GPS Coordinates: <u>691899 4317716</u>		
Date & Time: <u>5/23/05 5:00</u>	Facility Name: <u>Birhead Branch</u>	
Personnel: <u>Tucker Fredrickson</u>	Permit Number:	
Current Weather Conditions: <u>Sunny 80°F</u>	Weather Conditions for Past 7 days: <u>Approx. 0.5" of rain Hi Temp 80's</u>	
Photo Ids: Upstream: <u>22</u> Downstream: <u>23</u> Other:		

19.3

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.)

NA

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 type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>NA</u>	

Evidence of Human Use*:

<input type="checkbox"/> Roads	<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: <u>NA</u>				

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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Data Sheet B - Site Characterization

Page Two - WBID #0034:

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): 5	Length (ft): 15	Avg. Depth (ft): 0.5	Max. Depth (ft): 0.75
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input 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 type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): 15	Length (ft): 15	Avg. Depth (ft): 1.5	Max. Depth (ft): 3.5
<input 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%.)

20 % Cobble	30 % Gravel	50 % Sand	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

algae surface coverage - 15% periphyton 25% substrate coverage

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 checked="" 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 checked="" type="checkbox"/> Fine sediments	<input 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.

50 minnows observed, tire

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Signed: Jochen Fredrickson Date: 5/23/05

Organization: MDNR Position: ES

0034-03-up



0034-03-ds





"Cindy DiStefano "
<Cindy.DiStefano@mdc.mo.gov>

03/26/2008 11:34 AM

To "Michael Kruse" <michael.kruse@dnr.mo.gov>
cc
bcc
Subject Fwd: DNR Request - Sarah, Marv, Jen, Kenda

>>> Lynn Schrader 03/18/08 10:10 AM >>>
Gang,

With this note, I'll confirm that the latter observations were after 1975....especially since a couple of you reporting may not of even been born yet.

Would you guys confirm to Cindy the request for Stater, Brushy, and Bigelow creeks, please.

I know, I know.....the Clean Water Act says streams are suppose to be swimmable whether we actually saw someone or not. Cindy is doing her best for these.

Thanks,

Lynn

>>> Cindy DiStefano 3/14/2008 1:43 PM >>>
Lynn,

The following is a request received from DNR that I have edited to pertain to your region. I have included only the streams in your region and added page numbers that correspond to the page numbers on the map file. Hopefully, this information will be easy to obtain. If possible, I would like the information by March 26th, so I can meet DNR's deadline.

Email from Mike Kruse, DNR:

I am following up on conversations you previously had with Donna Menown regarding the letter of comments provided to us from John Hoskins and the MDC on 8/24/2005. The letter pertains to observations of whole-body contact recreation in streams we completed Use Attainability Analyses for in 2005. After reviewing the 2005 UAAs additional questions arose that we hope you may be able to answer. We greatly appreciate all your help on this matter.

After reviewing the UAAs available on-line, it became apparent that some of the surveys were completed in locations other than the streams in question. Since the comments in the letter from the MDC did not provide WBID numbers and the maps provided in the 2005 UAAs may not be entirely accurate, we cannot be certain those observations came from the correct streams. Would you be able to tell us if the following observations were indeed made on the correct stream segments and equally important if the observations occurred after 11/28/1975? I have attached maps and locations of the streams in question.

Stater Cr. (WBID 1850): public swimming observed - Crawford Co. - Page 6

Brushy Fk. (WBID 33): children playing and splashing observed - Lincoln Co. - Page 8

Bigelow's Cr. (WBID 1608): children playing and splashing observed -
St. Charles Co - Page 10

Additionally, the following list of streams is of those the MDC
observed WBCR, however we need confirmation the actions occurred after
11/28/1975.

Whittenburg Cr. (WBID 1899): public swimming observed - Crawford Co.
Birkhead Br. (WBID 34): children playing and splashing observed -
Lincoln Co.
Paris Br. (WBID 176): children playing and splashing observed -
Lincoln Co.
Turkey Cr. (WBID 199): public swimming observed - Lincoln Co.
Mill Cr. (WBID 2124): public swimming observed - Washington Co.

I will be at a meeting next week, so if you have questions please
contact Mike at:

Mike Kruse
Div. of Env. Quality/Water Protection Program
MO Dept. of Natural Resources, Jeff. City
(573) 522-4901; FAX [522-9920]
e-mail: michael.kruse@dnr.mo.gov

Thanks!
Cindy



Maps_UAA Kruse.doc