

Kelley Branch (1018)
Use Attainability Analysis



Boone County Regional Sewer District
1314 North 7th Street
Columbia, MO 65201-3902

Prepared by
Barr Engineering Company
July 2005

Kelley Branch (1018)

Use Attainability Analysis

Boone County Regional Sewer District

1314 North 7th Street

Columbia, MO 65201-3902

July 2005



Barr Engineering Company
3236 Emerald Lane
Jefferson City, MO 65109
Phone: (573) 636-5331
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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

RECEIVED

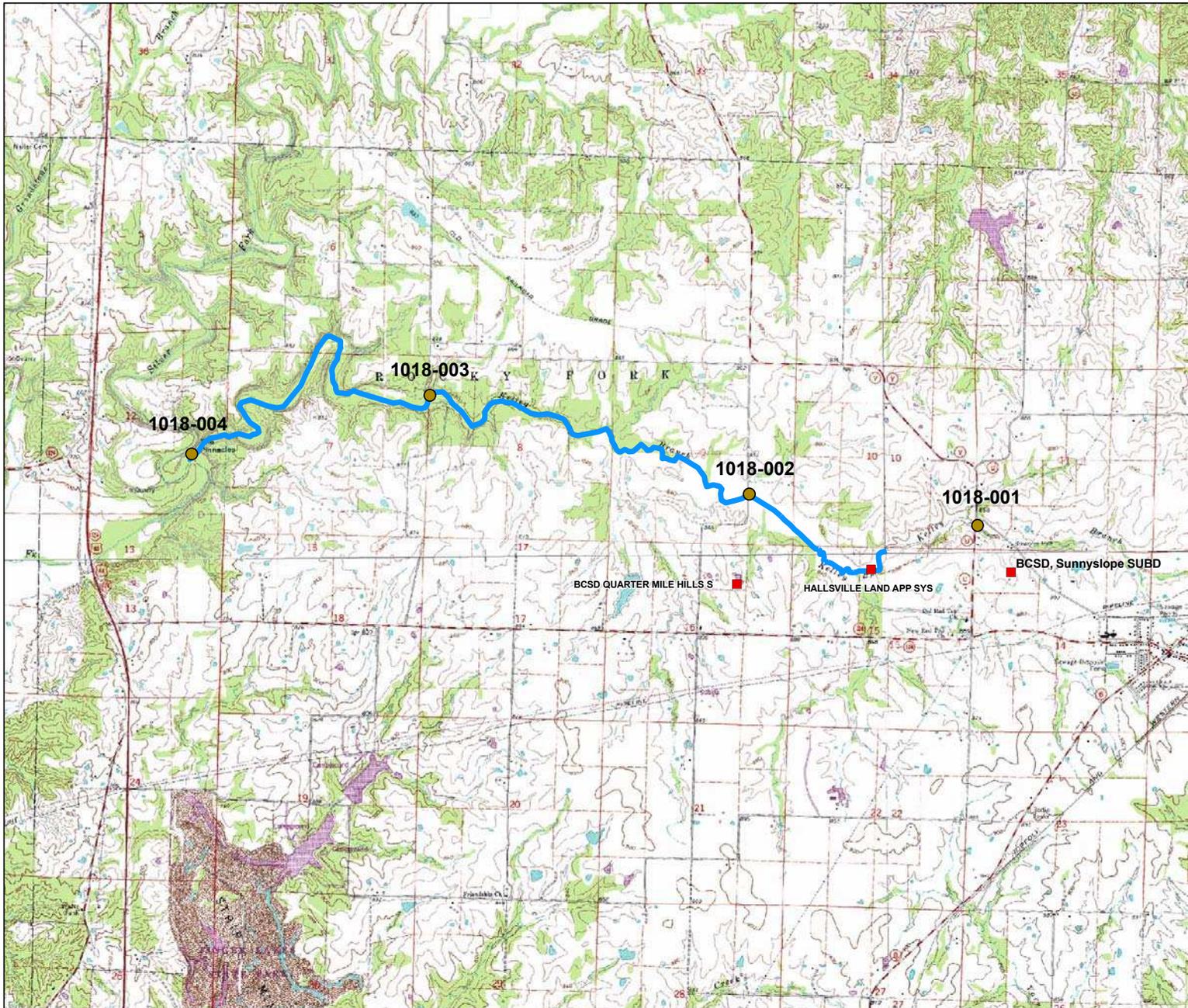
JUL 13 2005

WATER PROTECTION PROGRAM

Water Body Name (from USGS 7.5' quad): Kelley Branch
8-digit HUC: 10300102
Missouri WBID #: 1018
County: Boone
Upstream Legal Description: North line Section 15, Township 50N, Range 12W
Downstream Legal Description: Mouth
Upstream Coordinates: UTM (Z15N) 564939E; 4330759N
Downstream Coordinates: UTM (Z15N) 558561E; 4331528N
Discharger Facility Name(s): Boone County Regional Sewer District, Sunnyslope Subdivision Permit # MO0095354 Hallsville Land App System Permit # MO0104990 Boone County Regional Sewer District Quarter Mile Hills South Permit # MO0126446
Discharger Permit Number(s): See Above.
Number of Sites Evaluated: 4
Name of Surveyor and Telephone Number: Alan Fandrey (573-638-5013)
Organization: Barr Engineering Company
Position: Civil Engineer

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

Signed: Alan J Fandrey Date: 6/14/05



- Facility Location
- Assessment Site
- Stream Reach

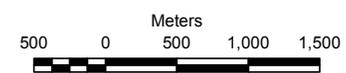
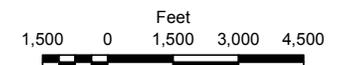


Figure 1
KELLEY BRANCH

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 #: 1018-001	Site Location Description: Kelley Branch at Route U crossing (East line Section 10, T50N, R12W; BID 104) Boone County	
Site GPS Coordinates: 565646E; 4330985N		
Date & Time: 5/27/05 - 12:15	Facility Name: BCSD Sunnyslope Subdivision	
Personnel: Alan J. Fandrey	Permit Number: MO0095354	
Current Weather Conditions: Clear - 70s	Weather Conditions for Past 7 days: Last rain on May 22	
Photo Ids: Upstream: 1018-001US	Downstream: 1018-001DS	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 checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Riprap	

Evidence of Human Use*:

<input checked="" 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 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)

*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.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1018-001:

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): 15-30	Length (ft): 100	Avg. Depth (ft): 1.0	Max. Depth (ft): 1.5
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): Same as below	

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): 2-20	Length (ft): 100	Avg. Depth (ft): 0.3	Max. Depth (ft): 1.0
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): < 0.1	

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

10% Cobble	% Gravel	% Sand	% Silt	90% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Some grasses growing in shallow areas.

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 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.
Downstream pool caused in part by vegetation growth. Upstream pool caused in part by riprap.

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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: Alan J. Family Date: May 27, 2005
 Organization: Barr Engineering Company Position: Engineer



Photo ID 1018-001US: Upstream (Kelley Branch)



Photo ID 1018-001DS: Downstream (Kelley Branch)

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 #: 1018-002		Site Location Description: Kelley Branch at road crossing (east half of Section 9 T50N, R12W; BID101) Boone County	
Site GPS Coordinates: 563590E; 4331223N			
Date & Time: 5/27/05 - 9:15 a.m.		Facility Name: See Report Table 2	
Personnel: Alan J. Fandrey		Permit Number: See Report Table 2	
Current Weather Conditions: Clear - 70s		Weather Conditions for Past 7 days: Last Rain on May 22	
Photo Ids: Upstream: 1018-002US	Downstream: 1018-002DS	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 checked="" type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Agriculture	

Evidence of Human Use*:

<input checked="" 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 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)

*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.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1018-002:

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): 15	Length (ft): 200	Avg. Depth (ft): 1.0	Max. Depth (ft): 1.5
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <0.1	

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): 200	Avg. Depth (ft): 1.0	Max. Depth (ft): 1.5
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): same as above	

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

20% Cobble	% Gravel	% Sand	% Silt	80% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Small amount of algae

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: brown
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Other: debris
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: algae - leaves

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: Alan J Farley Date: May 27, 2005
 Organization: Barr Engineering Company Position: Engineer



Photo ID 1018-002US: Upstream (Kelley Branch)



Photo ID 1018-002DS: Downstream (Kelley Branch)

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 #: 1018-003		Site Location Description: Kelley Branch at road crossing (at easterly line Section 7, T50N, R12W; BID 102) Boone County	
Site GPS Coordinates: 560709E; 4332076N			
Date & Time: 5/27/05 - 10:15 a.m.		Facility Name: See Report Table 2	
Personnel: Alan J. Fandrey		Permit Number: See Report Table 2	
Current Weather Conditions: Clear - 70s		Weather Conditions for Past 7 days: Last Rain on May 22	
Photo Ids: Upstream: 1018-003US	Downstream: 1018-003DS	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 checked="" type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input checked="" 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 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 #1018-003

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): 12-24	Length (ft): 200	Avg. Depth (ft): 1.0	Max. Depth (ft): 2.0
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): < 0.1	

Downstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): 4	Length (ft): 10	Avg. Depth (ft): <0.1	Max. Depth (ft): <0.1
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): 24	Length (ft): 150	Avg. Depth (ft): 1.0	Max. Depth (ft): 2.0
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): same as above	

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

5% Cobble	5% Gravel	% Sand	45% Silt	45% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

None

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: brown
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 checked="" type="checkbox"/> Foam	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: debris

Comments: Please attach additional comments (including information from interviews) to this form.
Pool depth is likely the result of sour under and around bridge.

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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: Alan J. Hawley Date: May 27, 2005
 Organization: Barr Engineering Company Position: Engineer



Photo ID 1018-003US: Upstream (Kelley Branch)



Photo ID 1018-003DS: Downstream (Kelley Branch)

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 #: 1018-004		Site Location Description: Kelley Branch at Mouth (E ½, Section 12, T50N, R13W; BID103) Boone County	
Site GPS Coordinates: 558561E; 4331528N			
Date & Time: 5/27/05 - 11:30		Facility Name: See Report Table 2	
Personnel: Alan J. Fandrey		Permit Number: See Report Table 2	
Current Weather Conditions: Clear - 70s		Weather Conditions for Past 7 days: Last rain on May 22	
Photo Ids: Upstream: 1018-004US	Downstream: -	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.) Pinnacles Youth Park parking lot is about 2,500 feet upstream, as measured along park trails and the banks of Silver Fork. This park has trails, pavilion, and fire pits. Park trails extend 1,000 feet to this assessment site. The remaining 1,500 feet has either no trails or poorly defined trails.				

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: see above	

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: None at site - see above				

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 #1018-004:

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): 10	Length (ft): 200	Avg. Depth (ft): 0.2	Max. Depth (ft): 0.5
<input checked="" type="checkbox"/> Pool	Width (ft): 30	Length (ft): 100	Avg. Depth (ft): 0.2	Max. Depth (ft): 0.5
<input checked="" type="checkbox"/> Flow	Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): < 0.1		

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 type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Flow	Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):		

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

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

None

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 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.

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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: Alan J. Family Date: May 27, 2005

Organization: Barr Engineering Company Position: Engineer



Photo ID 1018-004US: Upstream (Kelley Branch)

Data Sheet D—Recreational Use Interview

(A separate data sheet must be completed for each person interviewed.)

Assessor: Alan Fandrey

Interviewed: In person By phone

Date & Time: June 15, 2005 - 10 a.m.

Reason for the interviewee selection: Newspaper article

Water Body Segment Name and Identification Number: Kelley Branch (1018)

Water Body Segment Location Description (e.g. Highway 36 Bridge to Missouri River):

Unspecified

Comments: See attached memo.

—UNSUPERVISED CHILDREN SHALL NOT BE INTERVIEWED—

CONTACT INFORMATION

Legal Name: Ken Midkiff

Current Address: Columbia, MO

How long have you lived near this water body? NA

Other Information, such as phone number, occupation, or age (optional):

Probably 60s. Active in Sierra Club.

PERSONAL USE

Do you or your family recreate on the water body? Yes No

Activity	# of times/period	When? (season or year)	Where?
Swimming			
Kayaking			
Tubing			
Water Skiing			
Boating	Infrequent canoeing possibly only once	Most likely warm weather and high flow	Unspecified
Wading			
Hunting			
Fishing			
Trapping			
Other			

If no, please state the reasons why (general aesthetics, water quality, lack of depth, weather, safety, velocity): _____

Comments: See attached memo.

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

(Kelley Branch 1018)

WITNESSED USE

Has this activity occurred since November 28, 1975? Yes No

Activity	# of times/period	When? (season or year)	Where?
Swimming			
Kayaking			
Tubing			
Water Skiing			
Boating			
Wading			
Hunting			
Fishing			
Trapping			
Other			

Comments: _____

ANECDOTAL USE

Has this activity occurred since November 28, 1975? Yes No

Activity	# of times/period	When? (season or year)	Where?
Swimming			
Kayaking			
Tubing			
Water Skiing			
Boating			
Wading			
Hunting			
Fishing			
Trapping			
Other			

Comments: _____

Assessor's Signature: Alvin Farris

Date: July 1, 2005

To: BCRSD UAA File (25/11-031)
From: Al Fandrey
Subject: June 15 Interview with Ken Midkiff
Date: June 21, 2005

This is a summary of my June 15, 2005 meeting with Ken Midkiff. Mr. Midkiff describes himself as a sort of semi-retired person who is involved with the Sierra Club both locally and nationally. The purpose of the meeting was to obtain Ken's knowledge of recreational use of streams in Boone County particularly the nine streams for which UAAs are being prepared.

We had a wide-ranging discussion about a number of Boone County streams. The summary that follows is not chronological, but has been developed from my notes and organized by stream.

Information Sources—Ken indicated that the following people would have information regarding their personal use of Boone County streams and use by others.

- Chris Kelley, Columbia Area River Paddlers and Circuit Court Judge
- Rob Nix, Columbia Area River Paddlers
- Hank Ottinger, Westminster College Professor
- Scott Swofford, Assistant Editor, *Missourian*
- Jeff Barrow, canoeist
- Chris Bowman, canoeist
- Dee Dokken
- Scott Dye
- Tom Moran, former Chair of Osage Group/Sierra Club
- Kevin Feltz, USGS staff
- Chris Janku, Columbia City County
- Bill Ketterlin (whereabouts unknown)
- Jim Gast, RBSP Superintendent
- Roxie Campbell, RBSP Naturalist
- Scott Schulte, former RBSP Superintendent

Hinkson Creek

Hinkson Creek is probably the most heavily used of the Boone County streams. This is also the stream with likely the greatest documentation of use. Ken indicated that he has canoed most frequently between Broadway and Reactor Park. Ken indicated that Jeff Barrow, Scott Swofford, Chris Kelley, and Kevin Feltz also had canoed this reach. These canoe trips included whole body contact recreation – sometimes accidental. Ken indicated that there used to be a rope swing near the bridge in Stephen's Lake Park. Ken indicated that it seemed likely that the construction workers use this stream for at least the secondary contact recreation. Construction is currently underway at Broadway and just recently completed at I-70.

Ken also indicated that the Capen Park bluffs rock-climbing activities frequently result in whole body contact.

Ken also indicated that downstream of Providence there was swimming at Twin Lakes Recreational Area including a rope swing.

Grindstone Creek

Ken indicated that there was a good swimming hole on Grindstone Creek near the confluence with Hinkson Creek.

Bear Creek

Ken indicated that Chris Janku was more familiar with Bear Creek and probably has done canoeing on the creek. There are also a number of trails and parks along the middle section of the creek.

Kelley Branch

Ken indicated that he had been canoeing on Kelley Branch, and he knew of others who had also canoed the Kelley Branch.

Little Cedar Creek

Ken indicated that Bill Ketterlin had done some high flow canoeing on the Little Cedar Creek.

Little Bonne Femme Creek

Ken indicated that there was swimming and fishing on the Little Bonne Femme at the mouth and within Rock Bridge State Park (see also Gans Creek and Spring Creek).

Fowler Creek (via a June 21, 2005 e-mail)

Fowler Creek has been used for both swimming and secondary contact recreation.

Silver Fork

Ken indicated that there was kayaking on the Silver Fork upstream of the Pinnacles. Also, there is wading and likely swimming at the private Pinnacles Youth Park (possibly associated with the Boy Scouts).

Perche Creek

Ken indicated that this creek is also used for canoeing. He indicated usually people put in at Gillespie Bridge and take out at Providence.

Gans Creek

Ken indicated that Kevin Feltz, Scott Schulte, the former Rock Bridge State Park Superintendent, and Bill Ketterlin had canoed the Gans about 10 years ago. He indicated they got sick following this canoeing, and their illness was likely related to stream water quality. He indicated that they frequently canoed from US 63 to the low water crossing. Ken does stream team monitoring for this same reach of Gans Creek.

Clear Creek

Ken indicated there was recreational use of Clear Creek.