

Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 0167 Brushy Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

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Field Data Sheets for Recreational Use Stream Surveys

2005 JUN 29 PM 4:07

Data Sheet A - Water Body Identification

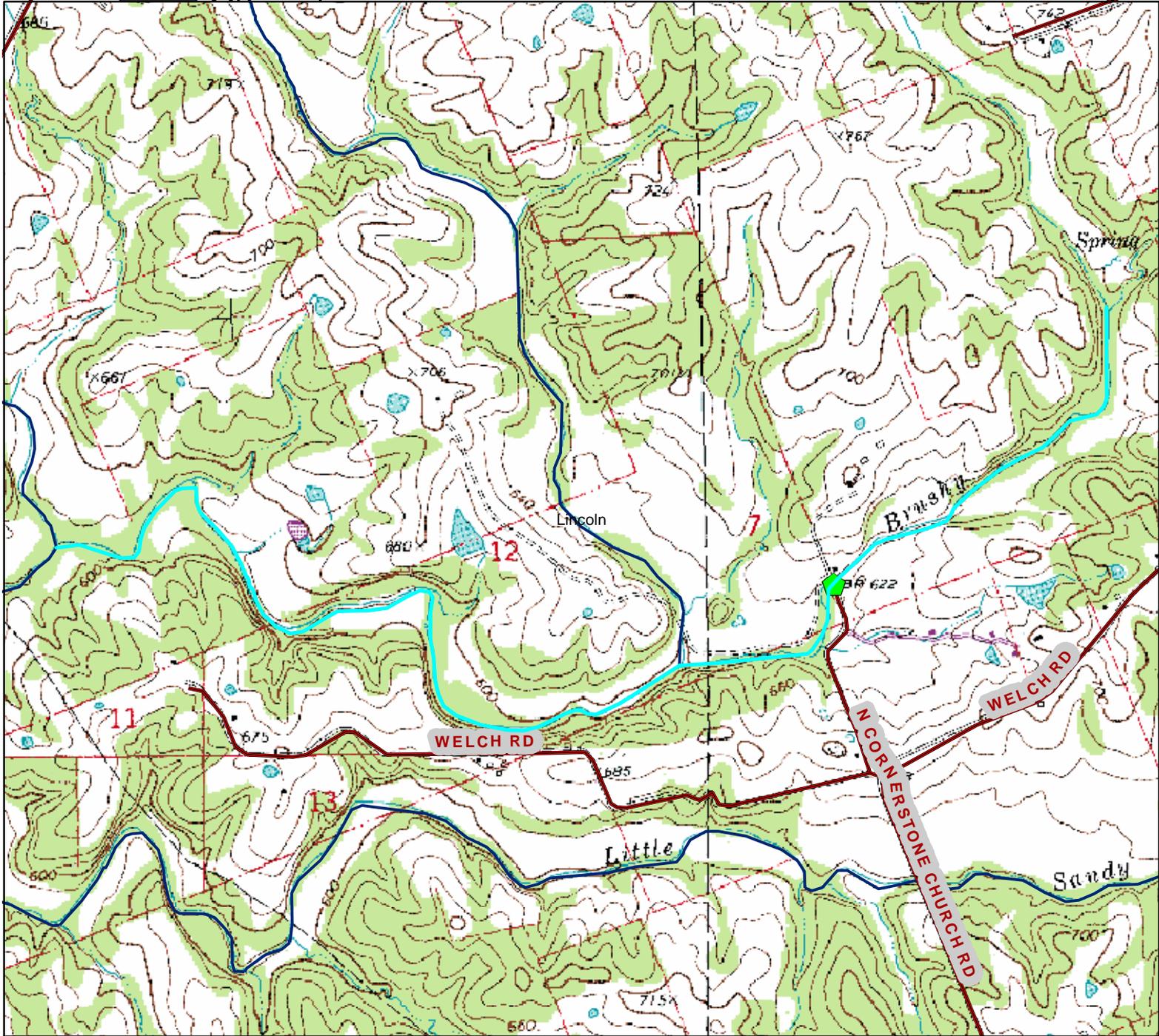
WATER PROTECTION PROGRAM

| | |
|--|----------------------------------|
| Water Body Name: (from USGS 7.5' quad) | BRUSHY CREEK |
| 8-digit HUC: | 07110008 |
| Missouri WBID #: | 0167 |
| County: | PIKE |
| Upstream Legal Description: | |
| Downstream Legal Description: | |
| Upstream Coordinates: (UGS 84, ddd.ddddd) | 39.20044 -91.06140 ^{AP} |
| Downstream Coordinates: (UGS 84, ddd.ddddd) | |
| Discharger Facility Name(s): | |
| Discharger Permit Number(s): | |
| Number of Sites Evaluated: | 1 |
| Name of Surveyor and Telephone Number: | Rm Duchrow 573/751-1300 |
| Organization: | DNR-WPP |
| Position: | STW Biologist |

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

Signed:  Date: 6/28/05

Brushy Creek (C) #0167 Pike County



Legend

-  Roads
-  Classified Waterbodies
-  Counties

0 0.15 0.3 0.6 Miles



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>0167-001</u> | Site Location Description: | |
| Site GPS Coordinates: <u>39.20044 -91.06140</u> | <u>CORNERSTONE CHURCH RD BR</u> | |
| Date & Time: <u>6/29/05 1120 hrs.</u> | Facility Name: | |
| Personnel: <u>[Signature]</u> | Permit Number: | |
| Current Weather Conditions: <u>Cloudy</u> | Weather Conditions for Past 7 days: <u>Clear w/ P.M. Showers</u> | |
| Photo Ids: Upstream: <u>100-0043</u> | Downstream: <u>100-0044</u> | 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 checked="" type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input checked="" type="checkbox"/> Other: <u>Rural - Pasture land</u> | |

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.

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>15'</u> | Length (ft): <u>40'</u> | Avg. Depth (ft): <u>0.2</u> | Max. Depth (ft): <u>0.3'</u> |
| <input checked="" type="checkbox"/> Flow Present? | <input type="checkbox"/> Yes <input checked="" 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): <u>5'</u> | Length (ft): <u>10'</u> | Avg. Depth (ft): <u>0.1</u> | Max. Depth (ft): <u>0.2'</u> |
| <input checked="" type="checkbox"/> Flow Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Estimated (ft ³ /sec): | |

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

| | | | | | |
|--------------------|-------------------|--------|--------|------------|---------------------|
| <u>20</u> % Cobble | <u>5</u> % Gravel | % Sand | % Silt | % Mud/Clay | <u>75</u> % Bedrock |
|--------------------|-------------------|--------|--------|------------|---------------------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|--|
| <u>CLOSE</u> <u>BRUSH</u> <u>*LGA</u> <u>SW</u> <u>STEM</u> <u>BED</u> <u>WS</u> |
|--|

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.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

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

Signed:  Date: 6/28/05

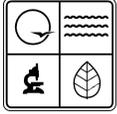
Organization: DNR-WPP Position: STM Biologist

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Field Data Sheets for Recreational Use Stream Surveys

2005 JUL -8 PM 3: 03

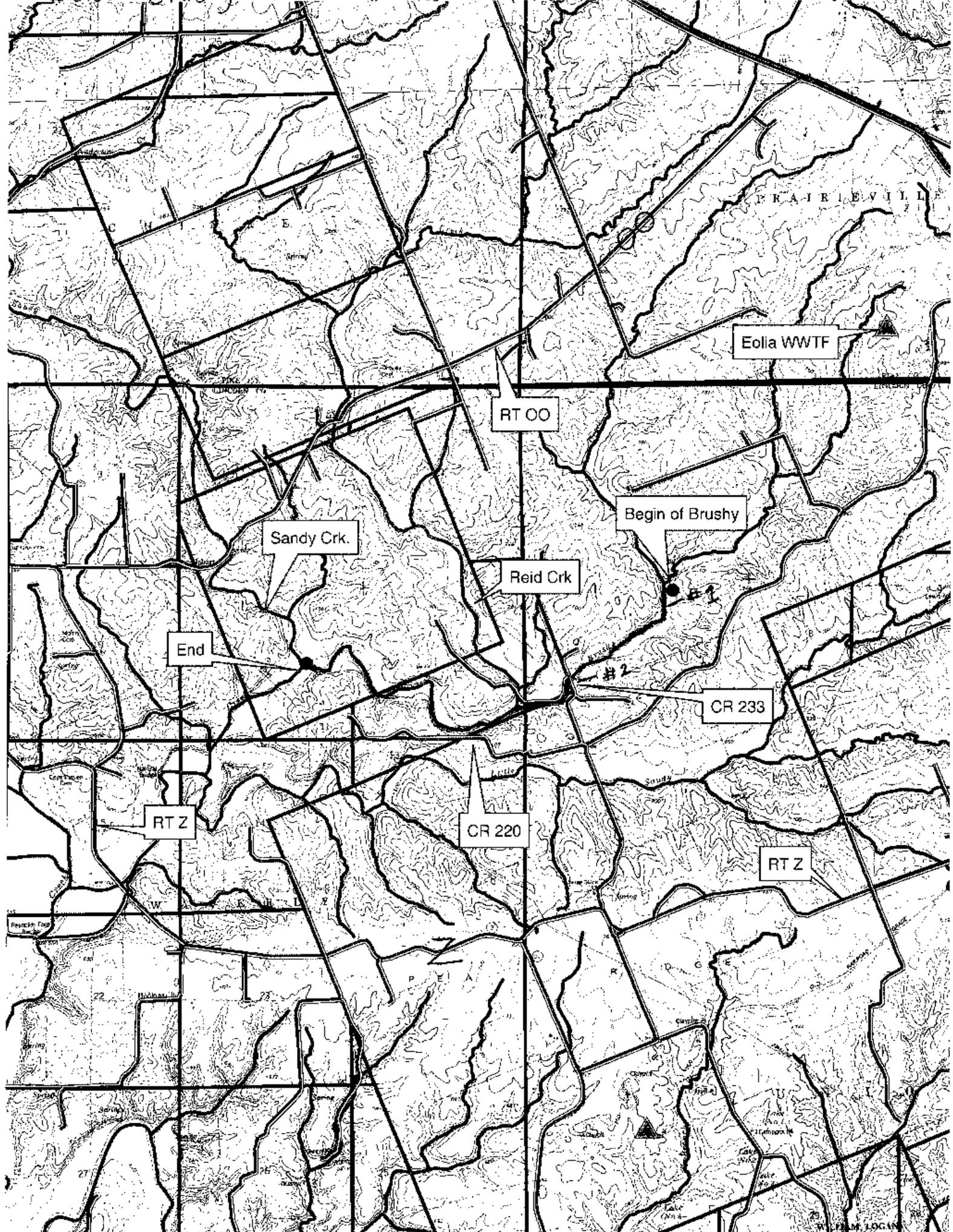
Data Sheet A - Water Body Identification

WATER PROTECTION PROGRAM

| | |
|--|----------------------------------|
| Water Body Name (from USGS 7.5' quad): | Brushy Creek |
| 8-digit HUC: | 07110008 |
| Missouri WBID #: | 0167 |
| County: | Pike Lincoln |
| Upstream Legal Description: | 3 Sec. 0 T51N R1W Landgrant 1710 |
| Downstream Legal Description: | SE Border of Sec. 7 T51N R1W |
| Upstream Coordinates: | UTM DD 39.20520 91.05133 |
| Downstream Coordinates: | UTM DD 39.20041 91.06137 |
| Discharger Facility Name(s): | |
| Discharger Permit Number(s): | |
| Number of Sites Evaluated: | 2 |
| 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: 7/1/05



Eolla WWTF

RT 00

Begin of Brushy

Sandy Crk.

Reid Crk.

End

CR 233

RT Z

CR 220

RT Z

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 #: 0167-01 | Site Location Description: Property of Ben Kaimann |
| Site GPS Coordinates: 39.20520 91.05133 | |
| Date & Time: 6/27/05 10:30 | Facility Name: Brushy Creek |
| Personnel: Tucker Fredrickson | Permit Number: |
| Current Weather Conditions: Sunny 85°F | Weather Conditions for Past 7 days: No rainfall |
| Photo Ids: Upstream: 03 Downstream: 04 Other: H Temp Range 89-95°F | |

45.9

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 type="checkbox"/> Steep slopes | <input checked="" type="checkbox"/> Other: Private Property | |

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: A | | | | |

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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Stream Morphology:

Upstream View Physical Dimensions: Dry

| | | | | |
|--|------------------------------|--|-----------------------------------|------------------|
| <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 checked="" 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): <u>6</u> | Length (ft): <u>25</u> | Avg. Depth (ft): <u>0.5</u> | Max. Depth (ft): <u>0.75</u> |
| <input type="checkbox"/> Flow Present? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

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

| | | | | | |
|--------------------|--------------------|------------------|--------|------------|-----------|
| <u>70</u> % Cobble | <u>15</u> % Gravel | <u>15</u> % Sand | % Silt | % Mud/Clay | % Bedrock |
|--------------------|--------------------|------------------|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

periphyton 30% 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.

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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: 6/27/05

Organization: MDNR Position: Environmental Specialist

0167_001_US



0167_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)

| | |
|---|---|
| Missouri WBID #: <u>0167-02</u> | Site Location Description: <u>Bridge crossing</u> <u>County Road 233</u> |
| Site GPS Coordinates: <u>39.20041 91.06137</u> | |
| Date & Time: <u>6/27/05 9:45 AM</u> | Facility Name: <u>Brushy Creek</u> |
| Personnel: <u>Tucker Fredrickson</u> | Permit Number: |
| Current Weather Conditions: <u>Sunny 85°F</u> | Weather Conditions for Past 7 days: <u>No rainfall</u> |
| Photo Ids: Upstream: <u>01</u> Downstream: <u>02</u> Other: <u>H Temp Range 89-95°F</u> | |

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 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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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>20</u> | Length (ft): <u>40</u> | Avg. Depth (ft): <u>1.0</u> | Max. Depth (ft): <u>1.5</u> |
| <input type="checkbox"/> Flow Present? | <input type="checkbox"/> Yes | <input checked="" 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): <u>12</u> | Length (ft): <u>25</u> | Avg. Depth (ft): <u>1.0</u> | Max. Depth (ft): <u>1.5</u> |
| <input type="checkbox"/> Flow Present? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

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

| | | | | | |
|--------------------|--------------------|------------------|--------|------------|---------------------|
| <u>10</u> % Cobble | <u>20</u> % Gravel | <u>10</u> % Sand | % Silt | % Mud/Clay | <u>60</u> % Bedrock |
|--------------------|--------------------|------------------|--------|------------|---------------------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

NA

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.

MINNOWS

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Signed: Jochen Fredrickson Date: 6/27/05

Organization: MDNR Position: Environmental Specialist

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