# Use Attainability Analysis

for

WBID 0602 Long Branch

Submitted by
Missouri Department of Natural Resources Staff

To
Missouri Department of Natural Resources
Water Protection Program

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WATER PROTECTION PROGRAM

## Field Data Sheets for Recreational Use Stream Surveys

### Data Sheet A - Water Body Identification

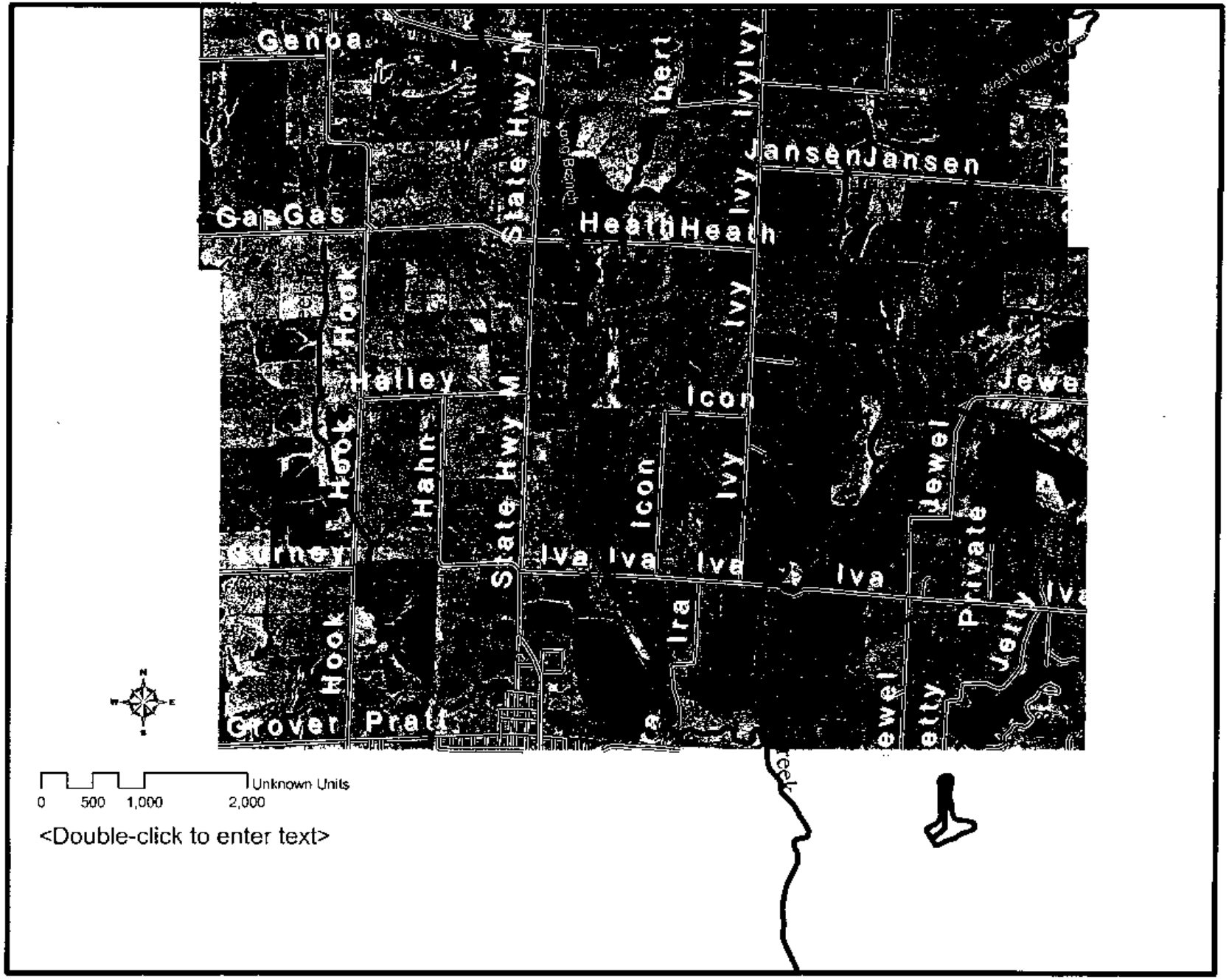
| | |
|---|---|
| Water Body Name (from USGS 7.5' quad): | Long Branch |
| 8-digit HUC: | 10280103 |
| Missouri WBID #: | 0602 |
| County: | Linn |
| Upstream Legal Description: | T 59N R20W S. 11 |
| Downstream Legal Description: | T 58N R.19W S. 32 |
| Upstream Coordinates: | N: 39.95790° W: 93.10130° |
| Downstream Coordinates: | N: 39.79623° W: 93.06003° |
| Discharger Facility Name(s): | |
| Discharger Permit Number(s): | |
| Number of Sites Evaluated: | 9 |
| Name of Surveyor and Telephone Number: | Wyn Kelley 573/884-3440 |
| Organization: | MDNR |
| Position: | Soil Scientist |

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

Signed: Wyn Kelley Date: 7/5/05

# Longbranch, Linn County (South)

13 miles 1230-UAA 10280103-Huc8 0602-WBID#



# Longbranch, Linn County CENTRAL

13 miles 1230-UAA 10280103-Huc8 0602-WBID#

# Longbranch, Linn County NORTH (5)

13 miles 1230-UAA 10280103-Huc8 0602-WBID#

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet B - Site Characterization

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

19ft

| | |
|---|---|
| Missouri WBID #: 0602-01 | Site Location Description: |
| Site GPS Coordinates: N: 39.95790° W: 93.10130° | |
| Date & Time: 7/5/05 12:30 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot + dry | Weather Conditions for Past 7 days: hot + dry (1" rain) |
| Photo Ids: Upstream: 0602U-01 #6 | Downstream: 0602D-01 #7 Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes stream banks | ☐ Other: | |

**Evidence of Human Use*:**

| | | | | |
|---|---|---|---|---|
| ☐ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☑ Other: trash (transmission & other pieces of metal) | | | | |

**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

Page Two – WBID #0602-01 Data Sheet B - Site Characterization

**Stream Morphology:**

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 15 | Length (ft): 50 | Avg. Depth (ft): 0.8 | Max. Depth (ft): 1.5 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 15 | Length (ft): 30 | Avg. Depth (ft): 0.8 | Max. Depth (ft): 1.5 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | % Sand | % Silt | 100 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ 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: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_001_US

0602_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 #: 0602-02 | Site Location Description: |
| Site GPS Coordinates: N: 39.94339° W: 93.09475° (16 ft) | |
| Date & Time: 7/5/05 12:45pm | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot + dry | Weather Conditions for Past 7 days: hot + dry (1" rain) |
| Photo Ids: Upstream: 0602U-02 #8 Downstream: 0602D-02 #9 | Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes (stream banks) | ☐ Other: N/A | |

**Evidence of Human Use*:**

| | | | | |
|---|---|---|---|---|
| ☑ Roads (bridge on Hollow Rd.) | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☒ Other: trash (Buckets, old gas cans, car axle) | | | | |

**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

Page Two – WBID #0602 -02: Data Sheet B - Site Characterization

### Stream Morphology:

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Run | Width (ft): 3 | Length (ft): 150 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.33 |
| ☐ Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 10 | Length (ft): 150 | Avg. Depth (ft): 0.5 | Max. Depth (ft): 0.7 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

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

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ 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: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_002_US

0602_002_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 #: 0602-03 | Site Location Description: |
| 254 Site GPS Coordinates: N: 39.91462° W: 93.08457° | |
| Date & Time: 7/5/05 1:15 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot+dry | Weather Conditions for Past 7 days: hot+dry (1" rain) |
| Photo Ids: Upstream: 06024-03 #10 / Downstream: 06020-03 #11 | Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes streambank | ☐ Other: | |

**Evidence of Human Use*:**

Bridge on Hill Road

| | | | | |
|---|---|---|---|---|
| ☑ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☑ Other: trash (5 gal bucket, plastic pipe, tire) | | | | |

**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

Page Two – WBID #0602-03 Data Sheet B - Site Characterization

**Stream Morphology:**

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 10 | Length (ft): 50 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.5 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 7 | Length (ft): 50 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.5 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | % Sand | % Silt | 100 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ Other: |

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

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Signed: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_003_US

0602_003_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 #: 0602-04 | Site Location Description: |
| Site GPS Coordinates: N: 39.88541° W: 93.08287° (13 ft) | |
| Date & Time: 7/5/05 1:35 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot + sunny | Weather Conditions for Past 7 days: hot + dry (1" rain) |
| Photo Ids: Upstream: 0602U-04 #12 / Downstream: 0602D-04 #13 | Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☐ Steep slopes | ☐ Other: N/A | |

**Evidence of Human Use*:**

| | | | | |
|---|---|---|---|---|
| ☑ Roads (Hyde Rd Bridge) | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☑ Other: trash (pieces of metal, tire) | | | | |

**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

Page Two – WBID #0602-04 Data Sheet B - Site Characterization

**Stream Morphology:**

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 20 | Length (ft): 50 | Avg. Depth (ft): 0.33 | Max. Depth (ft): 0.8 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 20 | Length (ft): 150 | Avg. Depth (ft): 0.4 | Max. Depth (ft): 0.9 |
| ☐ Flow | Present? ☐ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | % Sand | % Silt | % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|
| | | 5 | | 95 | |

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ Other: |

**Comments:** Please attach additional comments (including information from interviews) to this form.
many small fish observed

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Signed: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_004_US

0602_004_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 #: 0602-05 | Site Location Description: |
| Site GPS Coordinates: N: 39.87060° W: 93.08353° (20 ft) | |
| Date & Time: 7/5/05 2:00 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot + dry | Weather Conditions for Past 7 days: hot + dry (1" rain) |
| Photo Ids: Upstream: 06024-05 #14 / Downstream: 0602D-05 #15 | Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes (stream banks) | ☐ Other: | |

**Evidence of Human Use*:**

| | | | | |
|---|---|---|---|---|
| ☑ Roads (Bridge on Hacker Rd.) | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☐ 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

Page Two – WBID #0602-05: Data Sheet B - Site Characterization

### Stream Morphology:

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 6 | Length (ft): 20 | Avg. Depth (ft): 0.33 | Max. Depth (ft): 0.8 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Run | Width (ft): 6 | Length (ft): 100 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.5 |
| ☐ Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | 40 % Sand | % Silt | 60 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ Other: |

**Comments:** Please attach additional comments (including information from interviews) to this form.
many small fish 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: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_005_US

0602_005_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 #: 0602-06 | Site Location Description: |
| Site GPS Coordinates: N: 39.85050° W: 93.07655° | |
| Date & Time: 7/5/05 2:30 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot & dry | Weather Conditions for Past 7 days: hot & dry (1" rain) |
| Photo Ids: Upstream: 0602U-06 #16 | Downstream: 0602D-06 #17 Other: |

6 ft

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes streambanks | ☐ Other: | |

**Evidence of Human Use*:**

Hwy M Bridge

| | | | | |
|---|---|---|---|---|
| ☑ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☐ 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

Page Two – WBID #0602-06 Data Sheet B - Site Characterization

**Stream Morphology:**

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Run | Width (ft): 3 | Length (ft): 200 | Avg. Depth (ft): 0.2 | Max. Depth (ft): 0.33 |
| ☐ Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 10 | Length (ft): | Avg. Depth (ft): 0.6 | Max. Depth (ft): 1.0 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | 50 % Sand | % Silt | 50 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ 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: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_006_US

0602_006_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 #: 0602-07 | | Site Location Description: |
| Site GPS Coordinates: N: 39.83939° W: 93.07210° | | |
| Date & Time: 7/5/05 2:45 p.m. | | Facility Name: |
| Personnel: Wyn Kelley | | Permit Number: |
| Current Weather Conditions: hot & dry | | Weather Conditions for Past 7 days: hot & dry (1" rain) |
| Photo Ids: Upstream: 0602A-07 #18 | Downstream: 0602D-07 #19 | Other: |

18 ft

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☑ No trespass sign | ☐ Fence | ☐ Steep slopes | ☐ Other: N/A | |

**Evidence of Human Use*:**

Heath Rd Bridge

| | | | | |
|---|---|---|---|---|
| ☑ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☐ 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

Page Two – WBID #0602-01: Data Sheet B - Site Characterization

### Stream Morphology:

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 10 | Length (ft): 200 | Avg. Depth (ft): 0.5 | Max. Depth (ft): 1.2 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 15 | Length (ft): 50 | Avg. Depth (ft): 0.5 | Max. Depth (ft): 1.4 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | 20 % Gravel | % Sand | % Silt | 80 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ Other: |

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

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Signed: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_007_US

0602_007_DS

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet B - Site Characterization

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

30 ft

| | |
|---|---|
| Missouri WBID #: 0602-08 | Site Location Description: |
| Site GPS Coordinates: N: 39.81004° W: 93.06810° | |
| Date & Time: 7/5/05 3:[redacted] p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot & sunny | Weather Conditions for Past 7 days: hot & dry (1" rain) |
| Photo Ids: Upstream: 0602U-08 #20 / Downstream: 0602D-08 #21 | Other: |

**Uses Observed*:**

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes streambank | ☐ Other: N/A | |

**Evidence of Human Use*:**

Ivy Rd. Bridge

| | | | | |
|---|---|---|---|---|
| ☑ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☑ Other: Trash (Tires, Muffler, fender) | | | | |

**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

0602-08 Data Sheet B - Site Characterization

Page Two – WBID #_____:

### Stream Morphology:

#### Upstream View Physical Dimensions:

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 25 | Length (ft): 150 | Avg. Depth (ft): 0.6 | Max. Depth (ft): 2.0 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

#### Downstream View Physical Dimensions:

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☐ Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Pool | Width (ft): 25 | Length (ft): 200 | Avg. Depth (ft): 0.8 | Max. Depth (ft): 2.0 |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | 10 % Sand | % Silt | 90 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ 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: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_008_US

0602_008_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 #: 0602-09 | Site Location Description: |
| Site GPS Coordinates: N: 39.79623° W: 93.06003° | |
| Date & Time: 7/5/02 3:15 p.m. | Facility Name: |
| Personnel: Wyn Kelley | Permit Number: |
| Current Weather Conditions: hot+dry | Weather Conditions for Past 7 days: hot+dry (1" rain) |
| Photo Ids: Upstream: 0602U-09 #22 | Downstream: 0602D-09 #23 Other: |

24 ft

Uses Observed*:

| | | | | |
|---|---|---|---|---|
| ☐ Swimming | ☐ Skin diving | ☐ SCUBA diving | ☐ Tubing | ☐ Water skiing |
| ☐ Wind surfing | ☐ Kayaking | ☐ Boating | ☐ Wading | ☐ Rafting |
| ☐ Hunting | ☐ Trapping | ☐ Fishing | ☑ None of the above | ☐ 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.)

| | | | | |
|---|---|---|---|---|
| ☐ City/county parks | ☐ Playgrounds | ☐ MDC conservation lands | ☐ Urban areas | ☐ Campgrounds |
| ☐ Boating accesses | ☐ State parks | ☐ National forests | ☐ Nature trails | ☐ Stairs/walkway |
| ☐ No trespass sign | ☐ Fence | ☑ Steep slopes streambank | ☐ Other: N/A | |

**Evidence of Human Use*:**

Irg Rd Bridge

| | | | | |
|---|---|---|---|---|
| ☑ Roads | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Rope swings | ☐ Camping Sites | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle |
| ☑ Other: trash (metal container) | | | | |

**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

Page Two – WBID #0602-09: Data Sheet B - Site Characterization

**Stream Morphology:**

**Upstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Run | Width (ft): 6 | Length (ft): 160 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.33 |
| ☐ Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

**Downstream View Physical Dimensions:**

| | | | | |
|---|---|---|---|---|
| ☐ Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Run | Width (ft): 5 | Length (ft): 150 | Avg. Depth (ft): 0.25 | Max. Depth (ft): 0.4 |
| ☐ Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| ☑ Flow | Present? ☑ Yes ☐ No | | Estimated ($ft^3$/sec): | |

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

| % Cobble | % Gravel | 30 % Sand | % Silt | 70 % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|

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

N/A

**Water Characteristics*:** (Mark all that apply.)

| | | | | | |
|---|---|---|---|---|---|
| Odor: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☑ None | ☐ Other: |
| Color: | ☐ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☑ Other: Murky |
| Bottom Deposit: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☑ None | ☐ Other: |
| Surface Deposit: | ☐ Oil | ☐ Scum | ☐ Foam | ☑ None | ☐ Other: |

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

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Signed: [signature] Date: 7/5/05

Organization: MDNR Position: Soil Scientist

0602_009_US

0602_009_DS