# PIKE CREEK #2
# WBID 2815

## Recreational Use Attainability Analysis

May 2007

PREPARED FOR:
RFP No: B3Z07134
Water Quality Monitoring & Assessment Section
Water Protection Program
Division of Environmental Quality
MISSOURI DEPARTMENT OF NATURAL RESOURCES
301 West High Street
Jefferson City, MO 65102

PREPARED BY:
MEC WATER RESOURCES, INC.
1123 Wilkes Blvd., Ste. 400
Columbia, MO 65201

## Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

**I. Water Body Information** (For water body being surveyed)

| | |
|---|---|
| Water Body Name (from USGS 7.5' quad): Pike Creek 2 | |
| Missouri Water Body Identification (WBID) Number: 2815 | |
| 8-digit HUC: 11010007 | County: Butler |
| Upstream Legal Description (from Table H): 30, 25N, 6E | |
| Downstream Legal Description(from Table H): 15, 24N, 6E | |
| Number of sites evaluated 4 | |
| List all sites numbers, listed consequently upstream to downstream: 1, 2, 3, 4 | |

**II. Subesegmentation** (fill this section out only in cases where subsegmentation is being proposed)

| LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS) | | | |
|---|---|---|---|
| Upstream Coordinates: UTM X | Y | Downstream Coordinates: UTM X | Y |
| **HORIZONTAL COLLECTION METHOD** (Indicate the method used to determine the locational data.) | | | |
| Global Positioning System (GPS) | | Interpolation | |
| Static Mode | | Topographic Map or DRG | |
| Dynamic Mode (Kinematic) | | Aerial Photograph or DOQQ | |
| Precise Positioning Service | | Satellite Imagery | |
| Signal Averaging | | Interpolation Other | |
| Real Time Differential Processing | | | |
| **HORIZONTAL ACCURACY ESTIMATE** | | | |
| GPS Data Quality | | Interpolation Data Quality | |
| FOM | ± _____ Meters | Source Map Scale: 1:24,000 1:100,000 Other _____ | |
| EPE | ± _____ Feet or ± _____ Meters | | |
| PDOP | | ± _____ Feet or ± _____ Meters | |

**III. Discharger Facility Information** (list all permitted dischargers on the stream)

| |
|---|
| Discharger Facility Name(s): Motor Harbor Inc / Peck's Pike Creek Estates |
| Discharger Permit Number(s): MO 0048798 / MO 0101397 |

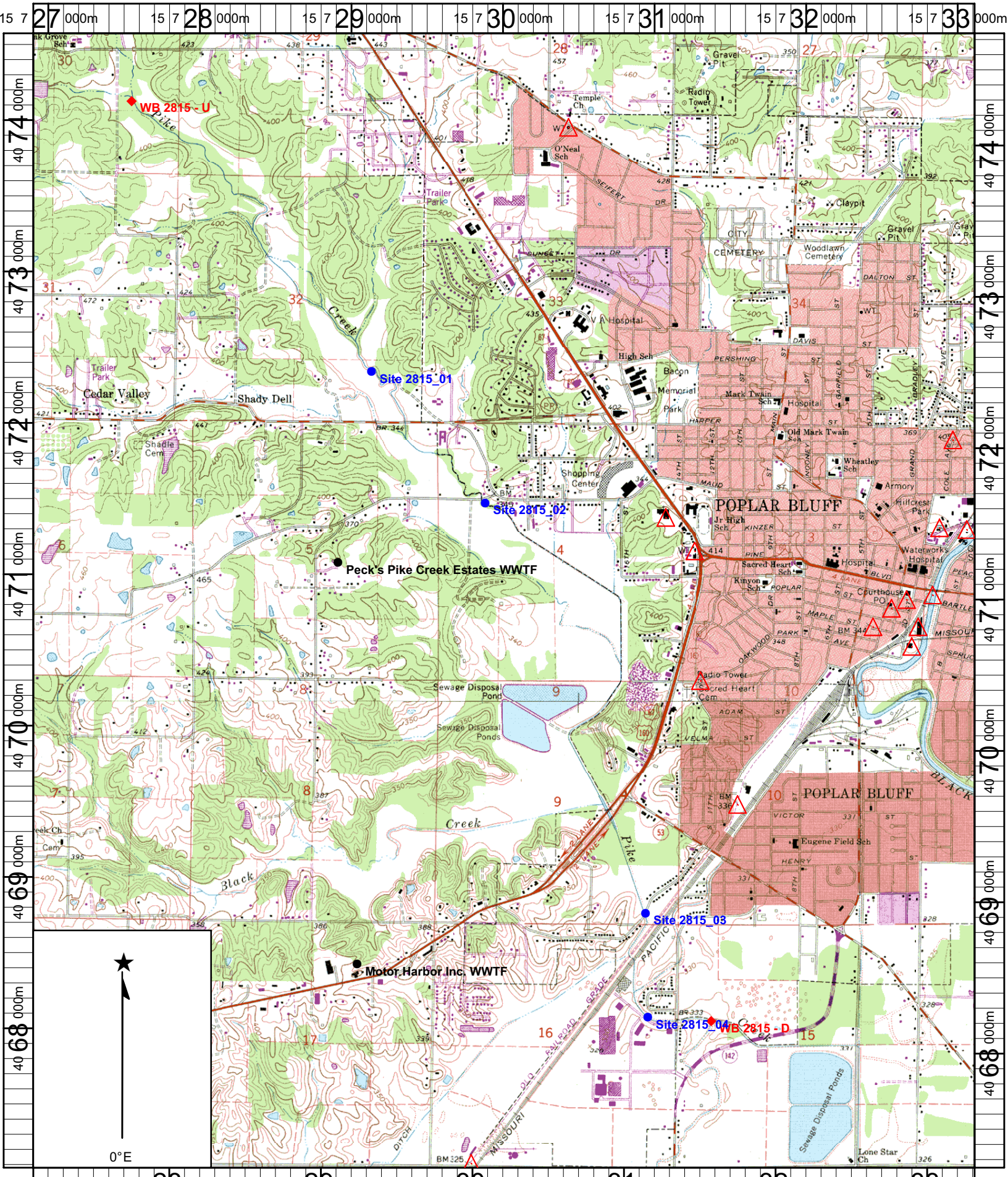
**IV. UAA Surveyor** (please print legibly)

| | |
|---|---|
| Name of Surveyor Robert Bacon | Telephone Number: (573) 634-7078 |
| Organization/Employer: ERC | |
| Position: Field Manager | |

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

**Signed:** Robert A Bacon **Date:** 5-23-07

RAC 5-30-07




Name: HARVIELL
Date: 5/28/2007
Scale: 1 inch equals 2564 feet

Location: 15 0730106 E 4070910 N

Copyright (C) 2000, Maptech, Inc.

WBID# 2815
Site# 01

***Field Data Sheets for Recreational Use Stream Surveys***

## Data Sheet B - Site Characterization

(must be completed for each site)

| | |
|---|---|
| Date & Time: 5-23-07 14:10 | Site Location Description (e.g., road crossing): just upstream of hwy PP |
| Personnel (Data Collectors): Bob & Travis | |
| Current Weather Conditions: Sunny, Ptly Cloudy | Facility Name: Motor Harbor Inc./Peck's Pike Creek Estates |
| | Permit Number: MO 0048798/MO 0101397 |
| Weather Conditions for Past 10 days: | |
| Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐ | |

### Site Locations:

**LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)**

Site GPS Coordinates: UTM X: 15 0729195 Y: 4072398

**HORIZONTAL COLLECTION METHOD** (Indicate the method used to determine the location data.)

| Global Positioning System (GPS) | | Interpolation | |
|---|---|---|---|
| Static Mode | | Topographic Map or DRG | |
| Dynamic Mode (Kinematic) | | Aerial Photograph or DOQQ | |
| Precise Positioning Service | | Satellite Imagery | |
| Signal Averaging | | Interpolation Other | |
| Real Time Differential Processing | | | |

**HORIZONTAL ACCURACY ESTIMATE**

| GPS Data Quality | | Interpolation Data Quality |
|---|---|---|
| FOM | ± _____ Meters | Source Map Scale: 1:24,000 1:100,000 Other _____ |
| EPE | ± 20 Feet or ± _____ Meters | ± _____ Feet or ± _____ Meters |
| PDOP | | |

### Photos:

| Photo ID# (WBID_Site# ##) | Photo Purpose and Direction (upstream, downstream, other) | Photo ID# (WBID_Site# ##) | Photo Purpose and Direction (upstream, downstream, other) |
|---|---|---|---|
| D 001 | upstream site 01-T11 | | |
| D 002 | downstream site 01-T01 | | |

### Uses Observed*: (Uses actually observed at time of survey.)

| | | | | |
|---|---|---|---|---|
| ☐ 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, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

### 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 | ☐ None of the above | ☐ Other: |

Comments: developing light industrial / commercial area

WBID# 2815
Site# 01

*Field Data Sheets for Recreational Use Stream Surveys*

## Data Sheet B - Site Characterization

(must be completed for each site)

### Indications of Human Use*: (attach photos)

| | | | | | |
|---|---|---|---|---|---|
| ☐ Roads | ☐ Rope swings | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Camping Sites | | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle | ☐ Other: |
| Comments: None | | | | | |

### Stream Morphology:

**Upstream View's Physical Descriptions:** Is there any water present at this view? ☑ Yes ☐ No

If so, is there an obvious current? ☑ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Transect (#) | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|---|
| RIFFLE | | | | | | |
| RUN | | | | | | |
| POOL | | | | | | |

**Downstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|
| RIFFLE | | | | | |
| RUN | | | | | |
| POOL | | | | | |

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

| % Cobble | % Gravel | % Sand | % Silt | % Mud/Clay | % Bedrock |
|---|---|---|---|---|---|
| | 30 | 20 | | 50 | |

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

< 5 percent of channel coverage w emersed macrophytes
Epiphyton growth on gravel

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

| | | | | | |
|---|---|---|---|---|---|
| ODOR: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☒ None | ☐ Other: |
| COLOR: | ☒ Clear | ☐ Green | ☐ Gray | ☐ Milky | ☐ Other: |
| BOTTOM DEPOSIT: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☒ None | ☐ Other: |
| WATER SURFACE DEPOSITION: | ☐ Oil | ☐ Scum | ☐ Foam | ☒ None | ☐ Other: |

**Comments:** Please attach any additional comments 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 affect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: Robert R Brown Date of Survey: 5-23-2007

Organization: ERC Position: Field Manager

ARC 5-30-07

up 001 (01-11)
dn 002 (01-01)

# MEC Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: 2815 Site #: 01 (WBID_Site#)

Estimated Channel Incision: .40 (m) (height between low bank width and water) Waypoint 214

GPS Location (taken at transect 1):

UTM X: 15 S 0779195 UTM Y: 4072398

Horizontal Accuracy Estimate (GPS Data Quality): +/- 20 (feet)

Average Stream Width: 5.0 (meters) Length of Survey Segment: 150 (meters) (20x average stream width)

Field Staff: Bob and Travis

## Dissolved Oxygen

Dissolved Oxygen: 9.20 (mg/L)

Dissolved Oxygen: 114.6 (% sat)

Specific Cond: 146 (µS/cm)

Water Temperature: 26.3 (°C)

14:40

## Transect Cross-Section

| Measurement | 01 | | 02 | | 03 | | 04 | | 05 | | 06 | | 07 | | 08 | | 09 | | 10 | | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) |
| 1 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 |
| 2 | .52 | .06 | .62 | .03 | .45 | .02 | .736 | .02 | .62 | .04 | .68 | .06 | .39 | .03 | .68 | .34 | .69 | .10 | .54 | .05 | .62 | .05 |
| 3 | 1.04 | .08 | 1.24 | .02 | .90 | .05 | 1.47 | .05 | 1.24 | .04 | 1.36 | .04 | .78 | .03 | 1.36 | .39 | 1.38 | .12 | 1.08 | .06 | 1.24 | .03 |
| 4 | 1.56 | .09 | 1.86 | .01 | 1.35 | .07 | 2.21 | .03 | 1.86 | .01 | 2.04 | .01 | 1.17 | .05 | 2.04 | .47 | 2.07 | .20 | 1.62 | .08 | 1.86 | .05 |
| 5 | 2.08 | .07 | 2.48 | .02 | 1.8 | .06 | 2.94 | .04 | 2.48 | .01 | 2.72 | .01 | 1.56 | .03 | 2.72 | .45 | 2.76 | .10 | 2.16 | .13 | 2.48 | .08 |
| 6 | 2.6 | .07 | 3.1 | .01 | 2.25 | .06 | 3.68 | .01 | 3.1 | .01 | 3.40 | .01 | 1.95 | .03 | 3.4 | .50 | 3.45 | .19 | 2.70 | .16 | 3.1 | .10 |
| 7 | 3.12 | .07 | 3.72 | .02 | 2.7 | .08 | 4.42 | .01 | 3.72 | 0 | 4.08 | .01 | 2.24 | .03 | 4.08 | .50 | 4.14 | .16 | 3.24 | .18 | 3.72 | .17 |
| 8 | 3.64 | .06 | 4.34 | .02 | 3.15 | .06 | 5.15 | 0 | 4.34 | 0 | 4.76 | .01 | 2.73 | .04 | 4.76 | .56 | 4.83 | .11 | 3.78 | .19 | 4.34 | .20 |
| 9 | 4.16 | .05 | 4.96 | .06 | 3.6 | .07 | 5.89 | .01 | 4.96 | .01 | 5.44 | .02 | 3.12 | .02 | 5.44 | .42 | 5.52 | .05 | 4.32 | .17 | 4.96 | .16 |
| 10 | 4.68 | .03 | 5.58 | .03 | 4.05 | .10 | 6.62 | .01 | 5.58 | .03 | 6.12 | .03 | 3.51 | .02 | 6.12 | .32 | 6.21 | .05 | 4.86 | .06 | 5.58 | .06 |
| 11 | 5.2 | .01 | 6.2 | .01 | 4.5 | .01 | 7.36 | .01 | 6.2 | .01 | 6.8 | .01 | 3.9 | .01 | 6.8 | .05 | 6.9 | .03 | 5.4 | .01 | 6.2 | .01 |
| 12 | 5.55 | 0 | 6.25 | 0 | 4.55 | 0 | 7.5 | 0 | 6.3 | 0 | 6.8 | — | 4.1 | 0 | 6.9 | 0 | 7.25 | 0 | 5.5 | 0 | 6.3 | 0 |
| Feature Type (riffle, run, or pool) | run | | run | | run | | run | | riffle | | riffle | | run | | Pool | | run | | run | | run | |

**Notes:** Transects will be measured beginning on left descending bank and finishing on right descending bank.
GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.
Transects in order of up to downstream.
Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1
Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Signed: [signature] Date: 5-23-2007

RMC 5-30-07

WBID# 2815
Site# 02

*Field Data Sheets for Recreational Use Stream Surveys*

## Data Sheet B - Site Characterization

(must be completed for each site)

| | |
|---|---|
| Date & Time: 5-23-07 15:00 | Site Location Description (e.g., road crossing): downstream of county rd 450 |
| Personnel (Data Collectors): Jon & Travis | |
| Current Weather Conditions: overcast | Facility Name: Motor Harbor Inc / Peck's Pike Creek Estates |
| | Permit Number: MO 0048798/MO 0101397 |
| Weather Conditions for Past 10 days: | |
| Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐ | |

## Site Locations:

**LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)**

Site GPS Coordinates: UTM X: 15 S 0729970 Y: 4071550

**HORIZONTAL COLLECTION METHOD** (Indicate the method used to determine the location data.)

| Global Positioning System (GPS) | | Interpolation | |
|---|---|---|---|
| Static Mode | | Topographic Map or DRG | |
| Dynamic Mode (Kinematic) | | Aerial Photograph or DOQQ | |
| Precise Positioning Service | | Satellite Imagery | |
| Signal Averaging | | Interpolation Other | |
| Real Time Differential Processing | | | |

**HORIZONTAL ACCURACY ESTIMATE**

| | GPS Data Quality | Interpolation Data Quality |
|---|---|---|
| FOM | ± _____ Meters | Source Map Scale: 1:24,000 1:100,000 Other _____ |
| EPE | ± 27 Feet or ± _____ Meters | ± _____ Feet or ± _____ Meters |
| PDOP | | |

## Photos:

| Photo ID# (WBID_Site# ##) | Photo Purpose and Direction (upstream, downstream, other) | Photo ID# (WBID_Site# ##) | Photo Purpose and Direction (upstream, downstream, other) |
|---|---|---|---|
| D 003 | downstream 02-01 | | |
| D 004 | upstream 02-11 | | |

## Uses Observed*: (Uses actually observed at time of survey.)

| | | | | |
|---|---|---|---|---|
| ☐ 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, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

## 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 | ☐ None of the above | ☐ Other: |

Comments: sub-urban neighborhood

WBID# 2815
Site# 02

***Field Data Sheets for Recreational Use Stream Surveys***

## Data Sheet B - Site Characterization

(must be completed for each site)

### Indications of Human Use*: (attach photos)

| | | | | | |
|---|---|---|---|---|---|
| ☐ Roads | ☐ Rope swings | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Camping Sites | | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle | ☐ Other: |
| Comments: None | | | | | |

### Stream Morphology:

**Upstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Transect (#) | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|---|
| RIFFLE | | | | | | |
| RUN | | | | | | |
| POOL | | | | | | |

**Downstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|
| RIFFLE | | | | | |
| RUN | | | | | |
| POOL | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| 5 % Cobble | 60 % Gravel | 10 % Sand | % Silt | 25 % Mud/Clay | % Bedrock |

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

~10% of the width covered w/ emergent macrophytes
periphyton growth, some filamentous algae

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

| | | | | | |
|---|---|---|---|---|---|
| ODOR: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☒ None | ☐ Other: |
| COLOR: | ☐ Clear | ☒ Green | ☒ Gray | ☐ Milky | ☐ Other: |
| BOTTOM DEPOSIT: | ☐ Sludge | ☐ Solids | ☑ Fine sediments | ☐ None | ☐ Other: |
| WATER SURFACE DEPOSITION: | ☐ Oil | ☐ Scum | ☐ Foam | ☒ None | ☐ Other: |

**Comments:** Please attach any additional comments 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 affect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: Robert R Bum Date of Survey: 5-22-2007

Organization: ERC Position: Field Manager



RHC 5-30-07

dn 003 (02-01)
up 004 (02-11)

# MEC Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: 2815 Site #: 02
(WBID_Site#)

Estimated Channel Incision: .50 (m) (height between low bank width and water)

GPS Location (taken at transect 1): Waypoint 215

UTM X: 15 S 0729970 UTM Y: 4071550

Horizontal Accuracy Estimate (GPS Data Quality): +/- 27 (feet)

Average Stream Width: 6.0 (meters) Length of Survey Segment: 150 (meters)
(20x average stream width)

Field Staff: Bob and Travis

## Dissolved Oxygen

Dissolved Oxygen: 8.58 (mg/L)

Dissolved Oxygen: 104.4 (% sat)

Specific Cond: 235 (µS/cm)

Water Temperature: 26.0 (°C)

15:00

## Transect Cross-Section

| Measurement | 01 | | 02 | | 03 | | 04 | | 05 | | 06 | | 07 | | 08 | | 09 | | 10 | | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) |
| 1 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .02 | 0 | .01 | 0 | .02 | 0 | .02 | 0 | .01 | 0 | .01 |
| 2 | .32 | .04 | .46 | .06 | .34 | .06 | .42 | .03 | .66 | .27 | .72 | .35 | .52 | .29 | .35 | .24 | .30 | .22 | .65 | .10 | .48 | .22 |
| 3 | .64 | .13 | .92 | .10 | .68 | .10 | .84 | .10 | 1.32 | .36 | 1.44 | .67 | 1.04 | .38 | .70 | .35 | .60 | .27 | 1.3 | .08 | .96 | .31 |
| 4 | .96 | .19 | 1.38 | .14 | 1.02 | .12 | 1.26 | .16 | 1.98 | .34 | 2.16 | .68 | 1.56 | .42 | 1.05 | .26 | .90 | .30 | 1.95 | .08 | 1.44 | .22 |
| 5 | 1.28 | .23 | 1.84 | .14 | 1.36 | .12 | 1.68 | .25 | 2.64 | .45 | 2.88 | .61 | 2.08 | .45 | 1.4 | .24 | 1.20 | .32 | 2.60 | .12 | 1.92 | .17 |
| 6 | 1.60 | .21 | 2.30 | .19 | 1.70 | .16 | 2.10 | .31 | 3.30 | .54 | 3.60 | .54 | 2.60 | .31 | 1.75 | .26 | 1.50 | .27 | 3.25 | .12 | 2.40 | .14 |
| 7 | 1.92 | .19 | 2.76 | .18 | 2.04 | .16 | 2.52 | .25 | 3.96 | .52 | 4.32 | .52 | 3.12 | .27 | 2.1 | .21 | 1.80 | .20 | 3.90 | .16 | 2.88 | .14 |
| 8 | 2.24 | .21 | 3.22 | .17 | 2.38 | .08 | 2.94 | .19 | 4.62 | .49 | 5.04 | .47 | 3.64 | .28 | 2.45 | .17 | 2.10 | .15 | 4.55 | .14 | 3.36 | .13 |
| 9 | 2.56 | .15 | 3.68 | .16 | 2.72 | .07 | 3.36 | .11 | 5.28 | .43 | 5.76 | .40 | 4.16 | .18 | 2.8 | .14 | 2.40 | .12 | 5.20 | .14 | 3.84 | .10 |
| 10 | 2.88 | .09 | 4.14 | .11 | 3.06 | .11 | 3.78 | .06 | 5.94 | .13 | 6.48 | .20 | 4.68 | .09 | 3.15 | .07 | 2.70 | .07 | 5.85 | .10 | 4.32 | .05 |
| 11 | 3.2 | .01 | 4.6 | .01 | 3.4 | .01 | 4.2 | .01 | 6.6 | .03 | 7.2 | .09 | 5.2 | .01 | 3.5 | .01 | 3.0 | .01 | 6.5 | .01 | 4.80 | .01 |
| 12 | 0 | — | 1.1 | 0 | 1.5 | 0 | 1.1 | 0 | 0.4 | 0 | 0 | — | .78 | 0 | .40 | 0 | .73 | 0 | .15 | 0 | .65 | 0 |
| Feature Type (riffle, run, or pool) | riffle | | run | | run | | run | | pool | | pool | | run | | run | | run | | run | | run | |

**Notes:** Transects will be measured beginning on left descending bank and finishing on right descending bank.
GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.
Transects in order of up to downstream.
Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1
Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Signed: [signature] Date: 5-23-2007

RLC 5-30-07

WBID# 2815
Site# 02

**Field Data Sheets for Recreational Use Stream Surveys**

## Data Sheet B - Site Characterization
(must be completed for each site)

| | |
|---|---|
| Date & Time: 5-23-2007 16:42 | Site Location Description (e.g., road crossing): downstream of National Ave |
| Personnel (Data Collectors): Bob and Travis | Facility Name: Motor Harbor Inc/Peck's Pike Creek Estates |
| Current Weather Conditions: Overcast | Permit Number: MO 0048798/ MO 0101397 |
| Weather Conditions for Past 10 days: | |
| Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐ | |

## Site Locations:

**LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)**

Site GPS Coordinates: UTM X: 15 S 073113 Y: 4068865

**HORIZONTAL COLLECTION METHOD** (Indicate the method used to determine the location data.)

| Global Positioning System (GPS) | | Interpolation | |
|---|---|---|---|
| Static Mode | | Topographic Map or DRG | |
| Dynamic Mode (Kinematic) | | Aerial Photograph or DOQQ | |
| Precise Positioning Service | | Satellite Imagery | |
| Signal Averaging | | Interpolation Other | |
| Real Time Differential Processing | | | |

**HORIZONTAL ACCURACY ESTIMATE**

| GPS Data Quality | | Interpolation Data Quality |
|---|---|---|
| FOM | ± _____ Meters | Source Map Scale: 1:24,000 1:100,000 Other _____ |
| EPE | ± 37 Feet or ± _____ Meters | ± _____ Feet or ± _____ Meters |
| PDOP | | |

## Photos:

| Photo ID# (WBID_Site#_##) | Photo Purpose and Direction (upstream, downstream, other) | Photo ID# (WBID_Site#_##) | Photo Purpose and Direction (upstream, downstream, other) |
|---|---|---|---|
| D005 | downstream view | | |
| D006 | upstream view | | |
| D007 | bacteria/algae growth from groundwater seeping from bank | | |

## Uses Observed*: (Uses actually observed at time of survey.)

| | | | | |
|---|---|---|---|---|
| ☐ 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, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

## 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 | ☐ None of the above | ☐ Other: |

Comments: Sub-urban area

WBID# 2815
Site# 03

***Field Data Sheets for Recreational Use Stream Surveys***

## Data Sheet B - Site Characterization

(must be completed for each site)

### Indications of Human Use*: (attach photos)

| | | | | | |
|---|---|---|---|---|---|
| ☐ Roads | ☐ Rope swings | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Camping Sites | | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle | ☐ Other: |
| Comments: None | | | | | |

### Stream Morphology:

**Upstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Transect (#) | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|---|
| RIFFLE | | | | | | |
| RUN | | | | | | |
| POOL | | | | | | |

**Downstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☒ No

**Select one of the following channel features:**

| Channel Feature | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|
| RIFFLE | | | | | |
| RUN | | | | | |
| POOL | | | | | |

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

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

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

periphyton growth on rocks in shallow areas

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

| | | | | | |
|---|---|---|---|---|---|
| ODOR: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☒ None | ☐ Other: |
| COLOR: | ☐ Clear | ☒ Green | ☒ Gray | ☐ Milky | ☐ Other: |
| BOTTOM DEPOSIT: | ☐ Sludge | ☐ Solids | ☒ Fine sediments | ☒ None | ☐ Other: |
| WATER SURFACE DEPOSITION: | ☐ Oil | ☒ Scum | ☒ Foam | ☐ None | ☐ Other: |

**Comments:** Please attach any additional comments 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 affect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: [signature] Date of Survey: 5-23-2007

Organization: ERC Position: Field Manager

RMC 5-30-07

D007 bacteria out of hill side

down D005 (03-01)

up D006 (03-11)

# MEC Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: 2815 Site #: 03 (WBID_Site#)

Waypoint # 216

Estimated Channel Incision: .45 (m) (height between low bank width and water)

GPS Location (taken at transect 1):

UTM X: 15 S 073113 UTM Y: 4068865

Horizontal Accuracy Estimate (GPS Data Quality): +/- 37 (feet)

Average Stream Width: 7.0 (meters) Length of Survey Segment: 150 (meters) (20x average stream width)

Field Staff: Bob & Travis

## Dissolved Oxygen

Dissolved Oxygen: 7.05 (mg/L)

Dissolved Oxygen: 87.2 (% sat)

Specific Cond: 224 (µS/cm)

Water Temperature: 26.2 (°C)

16:42

## Transect Cross-Section

| Measurement | 01 | | 02 | | 03 | | 04 | | 05 | | 06 | | 07 | | 08 | | 09 | | 10 | | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) |
| 1 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .02 | 0 | .01 | 0 | .01 | 0 | .02 | 0 | .01 | 0 | .01 |
| 2 | .42 | .13 | .78 | .14 | .71 | .02 | .76 | .04 | .75 | .12 | .57 | .07 | .68 | .03 | .79 | .13 | .57 | .17 | .59 | .12 | .68 | .07 |
| 3 | .84 | .23 | 1.56 | .17 | 1.42 | .10 | 1.52 | .29 | 1.51 | .28 | 1.14 | .25 | 1.36 | .11 | 1.58 | .17 | 1.14 | .38 | 1.18 | .32 | 1.36 | .10 |
| 4 | 1.26 | .27 | 2.34 | .22 | 2.13 | .22 | 2.28 | .31 | 2.26 | .33 | 1.71 | .43 | 2.04 | .25 | 2.37 | .28 | 1.71 | .49 | 1.77 | .43 | 2.04 | .33 |
| 5 | 1.68 | .16 | 3.12 | .23 | 2.84 | .34 | 3.04 | .33 | 3.01 | .56 | 2.28 | .40 | 2.72 | .43 | 3.16 | .36 | 2.28 | .63 | 2.36 | .58 | 2.72 | .57 |
| 6 | 2.10 | .22 | 3.90 | .22 | 3.55 | .37 | 3.80 | .33 | 3.76 | .56 | 2.85 | .49 | 3.40 | .45 | 3.95 | .31 | 2.85 | .72 | 2.95 | .61 | 3.40 | .60 |
| 7 | 2.52 | .15 | 4.68 | .20 | 4.26 | .30 | 4.56 | .26 | 4.51 | .42 | 3.42 | .49 | 4.08 | .46 | 4.74 | .26 | 3.42 | .73 | 3.54 | .55 | 4.08 | .57 |
| 8 | 2.94 | .04 | 5.46 | .22 | 4.97 | .26 | 5.32 | .14 | 5.26 | .26 | 3.99 | .47 | 4.76 | .45 | 5.53 | .20 | 3.99 | .71 | 4.13 | .55 | 4.76 | .52 |
| 9 | 3.36 | .05 | 6.24 | .18 | 5.68 | .23 | 6.08 | .09 | 6.01 | .17 | 4.56 | .32 | 5.44 | .39 | 6.32 | .30 | 4.56 | .63 | 4.72 | .50 | 5.44 | .47 |
| 10 | 3.78 | .03 | 7.02 | .15 | 6.39 | .11 | 6.84 | .07 | 6.76 | .14 | 5.13 | .11 | 6.12 | .32 | 7.11 | .25 | 5.13 | .47 | 5.31 | .21 | 6.12 | .18 |
| 11 | 4.2 | .01 | 7.8 | .02 | 7.1 | .01 | 7.6 | .01 | 7.5 | .01 | 5.7 | .01 | 6.8 | .01 | 7.9 | .61 | 5.7 | .03 | 5.9 | .01 | 6.8 | .01 |
| 12 | .15 | 0 | .10 | 0 | .10 | 0 | .05 | 0 | .07 | 0 | .08 | 0 | — | — | — | — | 04 | 0 | .17 | 0 | .20 | 0 |
| Feature Type (riffle, run, or pool) | riffle | | run | | run | | pool | | pool | | pool | | pool | | pool | | pool | | pool | | pool | |

Notes: Transects will be measured beginning on left descending bank and finishing on right descending bank.

GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.

Transects in order of up to downstream.

Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1

Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Signed: [signature] Date: 5-23-07

RLC 5-30-07

WBID# 2815
Site# 04

***Field Data Sheets for Recreational Use Stream Surveys***

## Data Sheet B - Site Characterization

(must be completed for each site)

| | |
|---|---|
| Date & Time: 5-23-2007 17:30 | Site Location Description (e.g., road crossing): upstream of Fair St. road crossing |
| Personnel (Data Collectors): Bob & Travis | |
| Current Weather Conditions: Overcast | Facility Name: Motor Harbor Inc./Peck's Pike Creek Estates |
| | Permit Number: MO 0048798 / MO 0101397 |
| Weather Conditions for Past 10 days: | |
| Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐ | |

### Site Locations:

**LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)**

Site GPS Coordinates: UTM X: 15 S 0731164 Y: 4068168

**HORIZONTAL COLLECTION METHOD** (Indicate the method used to determine the location data.)

| Global Positioning System (GPS) | | Interpolation | |
|---|---|---|---|
| Static Mode | | Topographic Map or DRG | |
| Dynamic Mode (Kinematic) | | Aerial Photograph or DOQQ | |
| Precise Positioning Service | | Satellite Imagery | |
| Signal Averaging | | Interpolation Other | |
| Real Time Differential Processing | | | |

**HORIZONTAL ACCURACY ESTIMATE**

| GPS Data Quality | | Interpolation Data Quality |
|---|---|---|
| FOM | ± _____ Meters | Source Map Scale: 1:24,000 1:100,000 Other _____ |
| EPE | ± 27 Feet or ± _____ Meters | ± _____ Feet or ± _____ Meters |
| PDOP | | |

### Photos:

| Photo ID# (WBID_Site#_##) | Photo Purpose and Direction (upstream, downstream, other) | Photo ID# (WBID_Site#_##) | Photo Purpose and Direction (upstream, downstream, other) |
|---|---|---|---|
| D008 | downstream 04-01 | | |
| D009 | upstream 04-11 | | |

### Uses Observed*: (Uses actually observed at time of survey.)

| | | | | |
|---|---|---|---|---|
| ☐ 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, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

### 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 | ☐ None of the above | ☐ Other: |

Comments: Industrial area

WBID# 2815
Site# 04

*Field Data Sheets for Recreational Use Stream Surveys*

## Data Sheet B - Site Characterization
(must be completed for each site)

### Indications of Human Use*: (attach photos)

| | | | | | |
|---|---|---|---|---|---|
| ☐ Roads | ☐ Rope swings | ☐ Foot paths/prints | ☐ Dock/platform | ☐ Livestock Watering | ☐ RV / ATV Tracks |
| ☐ Camping Sites | | ☐ Fire pit/ring | ☐ NPDES Discharge | ☐ Fishing Tackle | ☐ Other: |
| Comments: None | | | | | |

### Stream Morphology:

**Upstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

**Select one of the following channel features:**

| Channel Feature | Transect (#) | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|---|
| RIFFLE | | | | | | |
| RUN | | | | | | |
| POOL | | | | | | |

**Downstream View's Physical Descriptions:** Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☒ No

**Select one of the following channel features:**

| Channel Feature | Distance from access (m) | Width (m) | Length (m) | Median Depth (m) | Max. Depth (m) |
|---|---|---|---|---|---|
| RIFFLE | | | | | |
| RUN | | | | | |
| POOL | | | | | |

### 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.)

< 5% of the stream width covered in aquatic vegetation
periphiton covering rocks + filimentous algae covering shallow areas (very thick)

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

| | | | | | |
|---|---|---|---|---|---|
| ODOR: | ☐ Sewage | ☐ Musky | ☐ Chemical | ☒ None | ☐ Other: |
| COLOR: | ☐ Clear | ☒ Green | ☐ Gray | ☐ Milky | ☐ Other: |
| BOTTOM DEPOSIT: | ☐ Sludge | ☐ Solids | ☐ Fine sediments | ☒ None | ☐ Other: |
| WATER SURFACE DEPOSITION: | ☐ Oil | ☐ Scum | ☐ Foam | ☒ None | ☐ Other: |

**Comments:** Please attach any additional comments 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 affect another use.

**Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.**

Surveyor's Signature: [signature] Date of Survey: 5-23-2007

Organization: ERC Position: Field Manager

RLC 5-30-07

February 16, 2007

Down D008 04-01
up D009 04-11

# MEC Recreational Use Attainability Analysis Field Survey Sheet

Waterbody ID: 2815 Site #: 04 (WBID_Site#)

Estimated Channel Incision: .48 (m) (height between low bank width and water) Waypoint # 217

GPS Location (taken at transect 1):

UTM X: 1550731164 UTM Y: 4068168

Horizontal Accuracy Estimate (GPS Data Quality): +/- 27 (feet)

Average Stream Width: 7.0 (meters) Length of Survey Segment: 150 (meters) (20x average stream width)

Field Staff: Bob + Travis

## Dissolved Oxygen

Dissolved Oxygen: 9.44 (mg/L)

Dissolved Oxygen: 119.0 (% sat)

Specific Cond: 223 (µS/cm)

Water Temperature: 27.2 (°C)

## Transect Cross-Section

| Measurement | 01 | | 02 | | 03 | | 04 | | 05 | | 06 | | 07 | | 08 | | 09 | | 10 | | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) | Distance (m) | Depth (m) |
| 1 | 0 | .01 | 0 | .02 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .07 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .01 | 0 | .07 |
| 2 | .74 | .20 | .72 | .17 | .70 | .14 | .62 | .12 | .68 | .20 | .74 | .27 | .84 | .29 | .82 | .32 | .54 | .18 | .43 | .09 | .68 | .25 |
| 3 | 1.48 | .18 | 1.44 | .09 | 1.40 | .16 | 1.26 | .21 | 1.36 | .27 | 1.48 | .36 | 1.68 | .50 | 1.64 | .57 | 1.08 | .36 | .86 | .05 | 1.36 | .34 |
| 4 | 2.22 | .18 | 2.16 | .19 | 2.10 | .20 | 1.89 | .21 | 2.04 | .31 | 2.22 | .42 | 2.52 | .58 | 2.46 | .70 | 1.62 | .38 | 1.29 | .01 | 2.04 | .35 |
| 5 | 2.96 | .16 | 2.88 | .15 | 2.80 | .18 | 2.52 | .20 | 2.72 | .32 | 2.96 | .52 | 3.36 | .63 | 3.28 | .83 | 2.16 | .32 | 1.72 | .13 | 2.72 | .36 |
| 6 | 3.70 | .21 | 3.60 | .10 | 3.50 | .18 | 3.15 | .26 | 3.40 | .32 | 3.70 | .50 | 4.20 | .67 | 4.10 | .77 | 2.70 | .29 | 2.15 | .17 | 3.40 | .35 |
| 7 | 4.44 | .19 | 4.32 | .12 | 4.20 | .18 | 3.78 | .28 | 4.08 | .32 | 4.44 | .48 | 5.04 | .64 | 4.92 | .70 | 3.24 | .29 | 2.58 | .17 | 4.08 | .31 |
| 8 | 5.18 | .19 | 5.04 | .02 | 4.90 | .09 | 4.41 | .23 | 4.76 | .28 | 5.18 | .41 | 5.88 | .45 | 5.74 | .43 | 3.78 | .20 | 3.01 | .18 | 4.76 | .17 |
| 9 | 5.92 | .11 | 5.76 | .06 | 5.60 | .11 | 5.04 | .21 | 5.44 | .23 | 5.92 | .27 | 6.72 | .28 | 6.56 | .29 | 4.32 | .16 | 3.44 | .13 | 5.44 | .13 |
| 10 | 6.66 | .07 | 6.48 | .09 | 6.30 | .10 | 5.67 | .15 | 6.12 | .18 | 6.66 | .09 | 7.56 | .09 | 7.38 | .19 | 4.86 | .10 | 3.87 | .11 | 6.12 | 11 |
| 11 | 7.4 | .01 | 7.2 | .01 | 7.0 | .00 | 6.3 | .02 | 6.8 | .01 | 7.4 | 01 | 8.4 | .01 | 8.2 | .01 | 5.4 | .01 | 4.3 | .03 | 6.8 | .01 |
| 12 | .02 | 0 | .05 | 0 | .05 | 0 | .03 | 0 | .10 | 0 | .07 | 0 | .08 | 0 | .20 | 0 | .16 | 0 | 0 | 0 | .18 | 0 |
| Feature Type (riffle, run, or pool) | run | | riffle | | riffle | | run | | run | | run | | pool | | pool | | run | | riffle | | run | |

**Notes:** Transects will be measured beginning on left descending bank and finishing on right descending bank.
GPS location corresponds to Transect 01. Transects ordered in upstream to downstream order.
Transects in order of up to downstream.
Mark dry depth measurements as 0; measurements less than 0.1m as <0.1; and greater than 1m as >1
Measurement 1 depth = 0.1m (unless depth is insufficient); Measurement 11 depth = 0.1m (unless depth is insufficient); Measurement 12 distance = entire wetted width distance and depth = 0m.

Fair St.

Signed: [signature] Date: 5-23-07

RLC 5-30-07

**WBID# 2815 Pike Creek 2**

**Site# 1 Photo ID# 2, Downstream, T1**

**Site# 1 Photo ID# 1, Upstream, T 11**

**Site# 2 Photo ID# 3, Downstream, T1**

**Site# 2 Photo ID# 4, Upstream, T 11**

**WBID# 2815 Pike Creek 2**

**Site# 3  Photo ID# 5, Downstream, T1**

**Site# 3  Photo ID# 6, Upstream, T 11**

**Site# 3 Photo ID# 7, bacteria/algae growth**

**Site# 4  Photo ID# 9, Upstream, T 11**

**WBID# 2815 Pike Creek 2**

**Site# 4  Photo ID# 8, Downstream, T1**