



Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 3094 Ditch #8

Submitted by
MEC Water Resources, Inc.

To
Missouri Department of Natural Resources
Water Protection Program

Date Received: October 22, 2007

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):	Ditch # 8		
Missouri Water Body Identification (WBID) Number:	3094		
8-digit HUC:	08020204	County:	New Madrid, Stoddard
Upstream Legal Description (from Table H):	1, 24 N, 11 E		
Downstream Legal Description (from Table H):	12, 21 N, 11 E		
Number of sites evaluated:	13		
List all sites numbers, listed consequently upstream to downstream:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13		

Site Locations Map(s): Attach a map of the entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

II. Facility Information (list all permitted discharges to the water body segment)

Facility Name(s) and Permit Number(s):
Risco WWTF 100025852
Parma WWTF 100039900

III. UAA Surveyor (please print legibly)

Name of Surveyor	Abigail Welschmeyer	Telephone Number:	(513) 999-9215
Organization/Employer:	ERC		

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

Signed: Abigail Welschmeyer Date: 10/4/07

WBID 3094 Ditch 8 - New Madrid and Stoddard Counties



WBID 3094 Ditch 8 - New Madrid and Stoddard Counties



0 800 1,600 3,200 4,800 Meters

WBID 3094 Ditch 8 - New Madrid and Stoddard Counties



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0 800 1,600 3,200 4,800 Meters

WBID 3094 Ditch 8 - New Madrid and Stoddard Counties



0 800 1,600 3,200 4,800 Meters

WBID # 3094

Site # 1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>12:15 10/4/07</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW & TH</u>	<u>CR 732 downstream @ bridge</u>
Current Weather Conditions: <u>87° sunny w/ clouds</u>	Facility Name: <u>Risco WWTF Parma E/WTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>MO0029852 MO0039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>165024881</u>	Northing (UTM Y): <u>4071904</u>	Horizontal Accuracy: <u>(EPE) / FOM / PDOP</u> Meters <u>5</u>
Site 11	Easting (UTM X): <u>165024876</u>	Northing (UTM Y): <u>4071777</u>	Horizontal Accuracy: <u>(EPE) / FOM / PDOP</u> Meters <u>5</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-015</u>	<u>downstream T-1</u>	<u>J-016</u>	<u>upstream T-11</u>		

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

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

WBID # 3094

Site # 1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm Ground

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>20%</i> Sand	<i>40</i> % Silt	<i>40</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

emergent plant < 10% growth cover

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 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:

*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.

WBID # 3094

Site # 1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Surveyor's Signature: Alvin L. Weidinger Date of Survey: 10/4/07

Organization: OPC Position: Field Manager

WBID # 3094
 Site # 2

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>12:53 10/4/07</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW + TH</u>	<u>KR 750 downstream</u>
Current Weather Conditions: <u>88° sunny w/ clouds</u>	Facility Name: <u>Parma WWTF Risco WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M00039900 M00029852</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>1650248038</u>	Northing (UTM Y): <u>4070204</u>	Horizontal Accuracy: <u>(EPE) / FOM / PDOP</u> Meters <u>8</u>
Site 11	Easting (UTM X): <u>1650248029</u>	Northing (UTM Y): <u>4070040</u>	Horizontal Accuracy: <u>(EPE) / FOM / PDOP</u> Meters <u>4</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-017</u>	<u>downstream T-1</u>	<u>J-018</u>	<u>upstream T-11</u>		

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

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

WBID # 3094
 Site # 2

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: <i>Farm Fields</i>				

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>NONE</i>				

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

% Cobble	<i>20</i> % Gravel	<i>40</i> % Sand	<i>20</i> % Silt	<i>20</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

<i>~ 10% vegetation cover</i>

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:

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WBID # 3094
Site # 2

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Surveyor's Signature: *[Signature]* Date of Survey: 10/4/07
Organization: ERC Position: Field Manager

WBID # 3014

Site # 3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 13:23</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW+TH</u>	<u>High D downstream</u>
Current Weather Conditions: <u>88° sunny w/ clouds</u>	Facility Name: <u>Riso WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M0009892 M0009900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650247990</u>	Northing (UTM Y): <u>4068569</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>6</u>
Site 11	Easting (UTM X): <u>1650247981</u>	Northing (UTM Y): <u>4068410</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>4</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-019</u>	<u>Downstream T-1</u>	<u>J-020</u>	<u>upstream T-11</u>		

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

<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, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

WBID # 3094
 Site # 3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: <i>Farm fields</i>				

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>NONE</i>				

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

% Cobble	% Gravel	<i>20</i> % Sand	<i>40</i> % Silt	<i>40</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

<i><10% vegetating growth cover</i>
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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 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:

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WBID # 3094
Site # 3

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Surveyor's Signature: *Allyson H. Wenger* Date of Survey: 10/4/07
Organization: ERC Position: Field Manager

WBID # 3094

Site # 4

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 13:57</u>	Site Location Description (e.g., road crossing): <u>CR 760 downstream @ bridge</u>
Personnel (Data Collectors): <u>AW & TH</u>	Facility Name: <u>Piscataway WWTF Patuxent WWTF</u>
Current Weather Conditions: <u>85° sunny w/ clouds</u>	Permit Number: <u>M00029892 M00039900</u>
Weather Conditions for Past 10 days:	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>1650247900</u>	Northing (UTM Y): <u>41066978</u>	Horizontal Accuracy: <u>(EPI) FOM / PDOP</u> Meters <u>2/</u>
Site 11	Easting (UTM X): <u>1650247900</u>	Northing (UTM Y): <u>4066818</u>	Horizontal Accuracy: <u>(EPI) FOM / PDOP</u> Meters <u>4/</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-021</u>	<u>Downstream T-1</u>	<u>J-022</u>	<u>Upstream T-11</u>		

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

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

WBID # 3094

Site # 4

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm Fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>20</i> % Sand	<i>40</i> % Silt	<i>40</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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:

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WBID # 3094
Site # 41

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Surveyor's Signature: *Walter W. Schmeiser* Date of Survey: 10/4/07
Organization: ERC Position: Field Manager

WBID # 3094

Site # 5

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 14:27</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AWATH</u>	<u>CR 766 downstream</u>
Current Weather Conditions: <u>88 sunny w/ clouds</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>1100025852 110039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650247810</u>	Northing (UTM Y): <u>4065363</u>	Horizontal Accuracy: <u>(EP)</u> / FOM / PDOP	Meters	<u>8</u>
Site 11	Easting (UTM X): <u>1650247716</u>	Northing (UTM Y): <u>4065208</u>	Horizontal Accuracy: <u>(EP)</u> / FOM / PDOP	Meters	<u>7</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-023</u>	<u>Downstream T-1</u>	<u>J-024</u>	<u>Upstream T-11</u>		

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

<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, photo-documentation of evidence of recreational uses, etc. Use <i>Data Sheet D- Recreational Use Interview</i> when conducting interviews.)				

WBID # 3094
 Site # 5

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

farm fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>20</i> % Sand	<i>40</i> % Silt	<i>40</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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:

*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.

WBID # 3094
Site # 5

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

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

Surveyor's Signature: *Wynne L. Kelley* Date of Survey: 10/4/07
Organization: ERC Position: Field Manager

WBID # 3094

Site # 6

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 14:58</u>	Site Location Description (e.g., road crossing): <u>+CR 779</u>
Personnel (Data Collectors): <u>AW+TH</u>	<u>Huy Z Lanthien@brdy</u>
Current Weather Conditions: <u>88° sunny</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M00025892 M00039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650247267</u>	Northing (UTM Y): <u>4062167</u>	Horizontal Accuracy: <u>(EPB / FOM / PDOP)</u>	Meters	<u>5</u>
Site 11	Easting (UTM X): <u>1650247222</u>	Northing (UTM Y): <u>4061986</u>	Horizontal Accuracy: <u>(EPB / FOM / PDOP)</u>	Meters	<u>5</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-025</u>	<u>Downstream T-1</u>	<u>J-026</u>	<u>Upstream T-1</u>		

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

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

WBID # 3094

Site # 6

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>20</i> % Sand	<i>10</i> % Silt	<i>40</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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:

*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.

WBID # 3094
Site # C

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

Sections were dry

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

Surveyor's Signature: *Alvin L. Wilkey* Date of Survey: *10/4/07*
Organization: *ERC* Position: *Field Manager*

WBID # 3094

Site # 7

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 15:26</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AWZTH</u>	<u>CR 779 + 784 @ bridge downstream</u>
Current Weather Conditions: <u>87° sunny & clouds</u>	Facility Name: <u>Risco WWTF / Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>100029852 100039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input checked="" type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650247105</u>	Northing (UTM Y): <u>4058849</u>	Horizontal Accuracy: <u>(EPE)</u> / FOM / PDOP	Meters	<u>5</u>
Site 11	Easting (UTM X): <u>1650247106</u>	Northing (UTM Y): <u>4058687</u>	Horizontal Accuracy: <u>(EPE)</u> / FOM / PDOP	Meters	<u>6</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-027</u>	<u>Downstream T-1</u>	<u>J-028</u>	<u>Upstream T-11</u>		

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

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

WBID # 3094
 Site # 7

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm Fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>80</i> % Sand	<i>10</i> % Silt	<i>10</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments <i>few</i>	<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:

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WBID # 3094
Site # 7

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

some sections were dry

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

Surveyor's Signature: *Alison Wheeler* Date of Survey: *10/4/07*

Organization: *ERC* Position: *Field Manager*

WBID # 3094

Site # 8

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 16:39</u>	Site Location Description (e.g., road crossing): <u>CR 779 + 524 upstream</u>
Personnel (Data Collectors): <u>AW + TH</u>	
Current Weather Conditions: <u>87° sunny</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>MO026892 MO039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650246920</u>	Northing (UTM Y): <u>4052453</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>5</u>
Site 11	Easting (UTM X): <u>1650246934</u>	Northing (UTM Y): <u>4052458</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>6</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-032</u>	<u>downstream T-1</u>	<u>J-031</u>	<u>Upstream T-11</u>		

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

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

WBID # 3094
 Site # 8

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:
Farm Fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:
NONE

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

% Cobble	% Gravel	<i>30</i> % Sand	<i>30</i> % Silt	<i>10</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE - DRY

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

DRY

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WBID # 3094

Site # 8

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

DRY for all transects 1-11

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

Surveyor's Signature: *Alvin L. Williams* Date of Survey: 10/4/07

Organization: ERC Position: Field Manager

WBID # 3094
 Site # 9

Field Data Sheets for Recreational Use Stream Surveys

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

Date & Time: <u>10/4/07 16:55</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW+T14</u>	<u>CR 779 + 524 downstream</u>
Current Weather Conditions: <u>88° sunny</u>	Facility Name: <u>Risco WWTF Arma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M0002585 & M00039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650246940</u>	Northing (UTM Y): <u>4052411</u>	Horizontal Accuracy: <u>(EPE)</u> / FOM / PDOP	Meters	<u>6</u>
Site 11	Easting (UTM X): <u>1650246932</u>	Northing (UTM Y): <u>4052215</u>	Horizontal Accuracy: <u>(EPE)</u> / FOM / PDOP	Meters	<u>6</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-033</u>	<u>Downstream T-1</u>	<u>J-034</u>	<u>Upstream T-11</u>		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

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

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

WBID # 3094
 Site # 9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: <i>Farm fields</i>				

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>NONE</i>				

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

% Cobble	% Gravel	<i>80</i> % Sand	<i>10</i> % Silt	<i>10</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

<i>NONE - DRY</i>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

DRY

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WBID # 3094

Site # 9

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

DRY for all transects 1-11

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

Surveyor's Signature: *Walter G. Geyer* Date of Survey: 12/1/07

Organization: ERC Position: Field Manager

WBID # 3094

Site # 10

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 17:05</u>	Site Location Description (e.g., road crossing): <u>CR 779 + Hwy 62 ^{slightly} downstream</u>
Personnel (Data Collectors): <u>AW+TH</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Current Weather Conditions: <u>86° sunny</u>	Permit Number: <u>M00025852 M00039900</u>
Weather Conditions for Past 10 days:	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650246925</u>	Northing (UTM Y): <u>4049016</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>8</u>
Site 11	Easting (UTM X): <u>1650246920</u>	Northing (UTM Y): <u>4048814</u>	Horizontal Accuracy: <u>(EPE)</u> FOM / PDOP	Meters	<u>7</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-035</u>	<u>Downstream T-1</u>	<u>J-036</u>	<u>Upstream T-11</u>		

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

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

WBID # 3094

Site # 10

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm fields - town w/in 1/4 mile

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

% Cobble	% Gravel	<i>70</i> % Sand	<i>15</i> % Silt	<i>15</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE - DRY

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

DRY

*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.

WBID # 3094

Site # 10

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

Dry for all transects

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

Surveyor's Signature: *Alvin J. Wilson* Date of Survey: 10/4/07

Organization: ORC Position: Field Manager

WBID # 3094

Site # 11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 17:20</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW+TH</u>	<u>CR 779 + 240 downstream bridge</u>
Current Weather Conditions: <u>85° sunny</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M00025852 M00039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Site 01	Easting (UTM X): <u>1650246884</u>	Northing (UTM Y): <u>41047451</u>	Horizontal Accuracy: (EPE / FOM / PDOP) Meters <u>5</u>
Site 11	Easting (UTM X): <u>1650246885</u>	Northing (UTM Y): <u>41047259</u>	Horizontal Accuracy: (EPE / FOM / PDOP) Meters <u>8</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-037</u>	<u>Downstream T-1</u>	<u>J-038</u>	<u>Upstream T-11</u>		

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

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

WBID # 3094

Site # 11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm Fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

NONE

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

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

NONE - DRY

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

DRY

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WBID # 3094
Site # 11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

Dry for all transects 1-11

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

Surveyor's Signature: *Alvin G. Walker* Date of Survey: 10/4/07
Organization: ERC Position: Field Manager

WBID # 3094

Site # 12

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 12:35</u>	Site Location Description (e.g., road crossing): <u>CR 779 + 248 @ bridge downstream</u>
Personnel (Data Collectors): <u>AW & TH</u>	Facility Name: <u>Risco WWTF Parma WWTF</u>
Current Weather Conditions: <u>86° sunny</u>	Permit Number: <u>M00025852 M00039900</u>
Weather Conditions for Past 10 days:	
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>165024686</u>	Northing (UTM Y): <u>41044261</u>	Horizontal Accuracy: (EPE / FOM / PDOP)	Meters	<u>6</u>
Site 11	Easting (UTM X): <u>165024689</u>	Northing (UTM Y): <u>41044293</u>	Horizontal Accuracy: (EPE / FOM / PDOP)	Meters	<u>5</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-039</u>	<u>Downstream T-1</u>	<u>J-040</u>	<u>Upstream T-1</u>		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

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

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

WBID # 3094
 Site # 12

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:
Comments: <i>Farm Fields</i>				

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering
Comments / Other: <i>NONE</i>				

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

% Cobble	% Gravel	<i>70</i> % Sand	<i>15</i> % Silt	<i>15</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

NONE - DRY

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

None

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WBID # 3094

Site # 12

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

all transects were dry → 1-11

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

Surveyor's Signature: *Alyssa K. Wilson* Date of Survey: 10/4/07

Organization: ERC Position: Field Manager

WBID # 3094

Site # 13

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization

(must be completed for each site)

Date & Time: <u>10/4/07 17:50</u>	Site Location Description (e.g., road crossing):
Personnel (Data Collectors): <u>AW+TH</u>	<u>CR 262 downstream of bridge</u>
Current Weather Conditions: <u>85° sunny</u>	Facility Name: <u>Pisco WWTF Parma WWTF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>M00025852 M00039900</u>
Drought Conditions?: No drought <input type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input checked="" type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Location:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)					
Site 01	Easting (UTM X): <u>1650246764</u>	Northing (UTM Y): <u>4042626</u>	Horizontal Accuracy: <u>(EPE) FOM / PDOP</u>	Meters	<u>5</u>
Site 11	Easting (UTM X): <u>1650246764</u>	Northing (UTM Y): <u>4042442</u>	Horizontal Accuracy: <u>(EPE) FOM / PDOP</u>	Meters	<u>5</u>

Photos:

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>J-041</u>	<u>Downstream T-1</u>	<u>S-042</u>	<u>Upstream T-1</u>		

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

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

WBID # 3094

Site # 13

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

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 checked="" type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:

Comments:

Farm Fields

Evidence of Human Use*: (Attach photos and reference in "Photos" section)

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV / ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock Watering

Comments / Other:

None

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

% Cobble	% Gravel	<i>70</i> % Sand	<i>15</i> % Silt	<i>15</i> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input 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 type="checkbox"/> None	<input type="checkbox"/> Other:

*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.

WBID # 3094

Site # 13

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B – Site Characterization (continued)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

Comments: (Please record any additional comments here.)

all basins dry

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

Surveyor's Signature: *[Signature]* Date of Survey: *10/2/07*

Organization: *ERC* Position: *Field Manager*

Field Data Sheets for Recreational Use Stream Surveys

J71 15

J71 16

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>1</u> Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM 01 UTM X: <u>1650248991</u> UTM Y: <u>4071904</u> +/- <u>5</u> (meters) ^{4.9} 11 UTM X: <u>1650248762</u> UTM Y: <u>4071777</u> +/- <u>5</u> (meters) ⁵⁵ Average Stream Width: <u>4.5</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AWJTH</u>	<h3 style="text-align: center; margin: 0;">Dissolved Oxygen</h3> Date: <u>10-4-07</u> Time: <u>12:15</u> Dissolved Oxygen: <u>3.88</u> (mg/L) Dissolved Oxygen: <u>47</u> (% sat) Specific Cond: <u>325</u> (µS/cm) Water Temperature: <u>24.77</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1		.192	.05	.52	.10	.34	.07	.42	.08	.37	.13	.31	.02	.375	.10	.36	.08	.46	.11	.37	.16	.28	.10
2		.384	.08	1.04	.12	.68	.09	.84	.10	.74	.12	.62	.0	.75	.12	.72	.09	.92	.11	.74	.17	.56	.12
3		.576	.12	1.56	.15	1.02	.07	1.26	.12	1.11	.09	.93	.03	1.25	.16	1.08	.17	1.38	.10	1.11	.16	.84	.19
4		.768	.14	2.08	.13	1.36	.09	1.68	.15	1.48	.11	1.24	.11	1.5	.17	1.44	.16	1.84	.17	1.48	.20	1.12	.21
5		.96	.14	2.6	.0	1.7	.08	2.1	.11	1.85	.12	1.55	.19	1.875	.15	1.8	.12	2.3	.18	1.85	.22	1.4	.21
6		1.152	.14	3.12	.05	2.04	.07	2.52	.13	2.22	.06	1.86	.22	2.25	.12	2.16	.09	2.76	.15	2.22	.16	1.68	.23
7		1.344	.16	3.64	.07	2.38	.05	2.74	.20	2.59	.08	2.17	.22	2.625	.14	2.52	.09	3.22	.18	2.59	.13	1.96	.11
8		1.536	.15	4.16	.13	2.72	.05	3.36	.14	2.96	.07	2.48	.14	3	.11	2.88	.09	3.68	.09	2.96	.15	2.24	.15
9		1.728	.05	4.68	.08	3.06	.06	3.78	.07	3.33	.05	2.79	.22	3.375	.09	3.24	.05	4.14	.06	3.33	.11	2.52	.10
Right Bank		1.92	0	5.2	0	3.4	0	4.2	0	3.7	0	3.1	0	3.75	0	3.6	0	4.6	0	3.7	0	2.8	0
Feature Type		run		run		run		run		run		run		run		run		run		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Alexander W. Balaban Date: 10/4/07

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet C - Field Survey Results

J-017T-1 down
 J-018T-11 up

Waterbody ID: <u>3094</u> Site #: <u>2</u> Estimated Channel Incision: <u>0</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE/ PDOP / FOM) 01 UTM X: <u>1650248038</u> UTM Y: <u>4070204</u> +/- <u>8</u> (meters) ⁵⁶ 11 UTM X: <u>1650248029</u> UTM Y: <u>4070040</u> +/- <u>4</u> (meters) ⁵⁷ Average Stream Width: <u>3.0</u> (meters) Length of Survey Segment: <u>150</u> (meters) ⁵⁴ (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW + FH</u>	Dissolved Oxygen
	Date: <u>10/4/07</u> Time: <u>12:53</u>
	Dissolved Oxygen: <u>10.34</u> (mg/L)
	Dissolved Oxygen: <u>131.8</u> (% sat)
	Specific Cond: <u>309</u> (µS/cm)
	Water Temperature: <u>27.85</u> (°C)

Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1		.18	.04	.23	.09	.24	.05	.27	.07	.32	.13	.31	.06	.32	.15	.37	.04	.4	.10	.31	.10	.28	.14
2		.36	.07	.46	.12	.48	.07	.54	.13	.64	.10	.62	.12	.64	.18	.74	.17	.8	.20	.62	.12	.56	.22
3		.54	.08	.69	.11	.72	.08	.81	.12	.96	.11	.93	.09	.96	.13	1.11	.14	1.2	.20	.93	.12	.84	.19
4		.72	.08	.92	.11	.96	.08	1.08	.10	1.28	.13	1.24	.11	1.28	.09	1.48	.13	1.6	.14	1.24	.12	1.12	.19
5		.9	.07	1.15	.11	1.2	.09	1.35	.10	1.6	.13	1.55	.13	1.6	.07	1.85	.14	2.0	.13	1.55	.13	1.4	.18
6		1.08	.05	1.38	.11	1.44	.09	1.62	.11	1.92	.13	1.86	.09	1.92	.14	2.22	.18	2.4	.15	1.86	.19	1.68	.19
7		1.26	.06	1.61	.12	1.68	.09	1.89	.11	2.24	.16	2.17	.11	2.24	.15	2.59	.17	2.8	.17	2.17	.20	1.96	.18
8		1.44	.05	1.89	.10	1.92	.08	2.16	.09	2.56	.10	2.48	.14	2.56	.14	2.96	.12	3.2	.18	2.48	.20	2.24	.15
9		1.62	.03	2.07	.09	2.16	.07	2.43	.05	2.88	.05	2.79	.12	2.88	.07	3.33	.10	3.6	.11	2.79	.14	2.52	.14
Right Bank		1.8	0	2.3	0	2.4	0	2.7	0	3.2	0	3.1	0	3.2	0	3.7	0	4.0	0	3.1	0	2.8	0
Feature Type		run		run		run		run		run		run		run		run		run		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Alvin Wiland Date: 10/4/07

J-019 down T-1

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>3</u> Estimated Channel Incision: <u>3</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM <u>01</u> UTM X: <u>165 0247990</u> UTM Y: <u>4068569</u> +/- <u>6</u> (meters) <u>58</u> <u>11</u> UTM X: <u>165 0247981</u> UTM Y: <u>4068410</u> +/- <u>4</u> (meters) <u>59</u> Average Stream Width: <u>3.0</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW & TH</u>	Dissolved Oxygen Date: <u>10-4-07</u> Time: <u>13:23</u> Dissolved Oxygen: <u>9.49</u> (mg/L) Dissolved Oxygen: <u>120.2</u> (% sat) Specific Cond: <u>303</u> (µS/cm) Water Temperature: <u>27.42</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
	Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1		.24	.03	.29	.02	.31	.04	.3	.03	.31	.03	.35	.08	.37	.11	.26	.07	.29	.08	.29	.06	.28	.09
2		.48	.04	.58	.05	.62	.03	.6	.08	.62	.10	.7	.04	.74	.09	.52	.09	.58	.01	.58	.08	.56	.12
3		.72	.05	.87	.06	.93	.02	.9	.08	.93	.09	1.05	.02	1.11	.10	.78	.10	.87	.12	.87	.10	.84	.16
4		.96	.04	1.16	.07	1.24	.04	1.2	.04	1.24	.08	1.4	.02	1.48	.11	1.04	.17	1.16	.12	1.16	.15	1.12	.15
5		1.2	.03	1.45	.08	1.55	.04	1.5	.03	1.55	.07	1.75	.04	1.85	.09	1.3	.16	1.45	.14	1.45	.21	1.4	.14
6		1.44	.03	1.74	.07	1.86	.06	1.8	.03	1.86	.09	2.1	.08	2.22	.10	1.56	.14	1.74	.10	1.74	.26	1.68	.12
7		1.68	.03	2.03	.08	2.17	.06	2.1	.05	2.17	.07	2.45	.10	2.59	.10	1.82	.12	2.03	.10	2.03	.30	1.96	.11
8		1.92	.02	2.32	.15	2.48	.02	2.4	.06	2.48	.06	2.8	.08	2.96	.10	2.08	.09	2.32	.09	2.32	.22	2.24	.11
9		2.16	.06	2.61	.08	2.79	.05	2.7	.05	2.79	.06	3.15	.02	3.33	.13	2.34	.08	2.61	.06	2.61	.11	2.52	.08
	Right Bank	2.4	0	2.9	0	3.1	0	3.0	0	3.1	0	3.5	0	3.7	0	2.6	0	2.9	0	2.9	0	2.8	0
	Feature Type (riffle, run, or pool)	run																					

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Alexander H. Anderson Date: 10/4/07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

✓ 21 On
 ✓ 22 WPT-11

Waterbody ID: <u>3094</u> Site #: <u>4</u> Estimated Channel Incision: <u>.20</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM 01 UTM X: <u>1650247905</u> UTM Y: <u>40666978</u> +/- <u>4</u> (meters) <u>60</u> 11 UTM X: <u>1650247900</u> UTM Y: <u>40666818</u> +/- <u>4</u> (meters) <u>61</u> Average Stream Width: <u>3.0</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>TH + AW</u>	<h3 style="text-align: center; margin: 0;">Dissolved Oxygen</h3> Date: <u>10-4-07</u> Time: <u>13:57</u> Dissolved Oxygen: <u>6.95</u> (mg/L) Dissolved Oxygen: <u>86.6</u> (% sat) Specific Cond: <u>316</u> (µS/cm) Water Temperature: <u>26.55</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1		.29	.09	.21	.04	.31	.04	.25	.01	.24	.03	.31	.05	.37	.03	.33	.12	.31	.04	.27	.04	.32	.02
2		.56	.13	.42	.06	.62	.04	.5	.03	.48	.07	.62	.12	.74	.05	.66	.10	.62	.05	.54	.06	.64	.04
3		.84	.17	.63	.09	.93	.05	.75	.05	.72	.09	.93	.10	1.11	.04	.99	.08	.93	.07	.81	.12	.94	.03
4		1.12	.16	.84	.07	1.24	.07	1	.06	.96	.10	1.24	.09	1.48	.05	1.32	.06	1.24	.11	1.08	.08	1.28	.04
5		1.4	.14	1.05	.05	1.55	.08	1.25	.08	1.2	.10	1.55	.07	1.85	.05	1.65	.07	1.55	.10	1.35	.09	1.6	.06
6		1.68	.12	1.26	.04	1.86	.09	1.5	.07	1.44	.12	1.86	.03	2.22	.08	1.98	.06	1.86	.09	1.62	.07	1.92	.05
7		1.96	.09	1.47	.06	2.17	.10	1.75	.07	1.68	.11	2.17	.04	2.59	.10	2.31	.06	2.17	.09	1.89	.05	2.24	.06
8		2.24	.09	1.68	.06	2.48	.06	2	.06	1.92	.09	2.48	.04	2.96	.08	2.64	.08	2.48	.10	2.16	.05	2.56	.05
9		2.52	.09	1.89	.04	2.79	.02	2.25	.04	2.16	.03	2.79	.09	3.33	.05	2.97	.08	2.79	.09	2.43	.08	2.88	.07
Right Bank		.29	0	.21	0	.31	0	.25	0	.24	0	.31	0	.37	0	.33	0	.31	0	.27	0	.32	0
Feature Type		run		run		run		run		run		run		run		run		run		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Allyson W. Dwyer Date: 10/4/07

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>5</u> Estimated Channel Incision: <u>10</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>165 024 7810</u> UTM Y: <u>4065 363</u> +/- <u>8</u> (meters) <u>62</u> 11 UTM X: <u>165 024 7716</u> UTM Y: <u>4065 208</u> +/- <u>7</u> (meters) <u>63</u> Average Stream Width: <u>2.5</u> (meters) Length of Survey Segment: <u>156</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AWJ & TH</u>	Dissolved Oxygen Date: <u>10-4-07</u> Time: <u>14:27</u> Dissolved Oxygen: <u>9.09</u> (mg/L) Dissolved Oxygen: <u>117.3</u> (% sat) Specific Cond: <u>303</u> (µS/cm) Water Temperature: <u>28.48</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	.33	.06	.28	.10	.24	.07	.11	.07	.22	.01	.06	.01	.28	.03	.3	.01	.39	.05	.29	.05	.35	.07
	2	.66	.09	.56	.14	.48	.07	.22	.03	.44	.02	.12	.03	.56	.01	.6	.02	.78	.08	.58	.07	.7	.07
	3	.99	.09	.84	.15	.72	.03	.33	.03	.66	.02	.18	.07	.84	.03	.9	.04	1.17	.07	.87	.07	1.05	.07
	4	1.32	.10	1.12	.16	.96	.07	.44	.04	.88	.02	.24	.04	1.12	.07	1.2	.06	1.56	.09	1.16	.08	1.4	.08
	5	1.65	.07	1.4	.18	1.2	.03	.55	.03	1.1	.03	.3	.07	1.4	.04	1.5	.04	1.95	.07	1.45	.10	1.75	.10
	6	1.98	.06	1.68	.21	1.44	.03	.66	.07	1.32	.03	.36	.06	1.68	.04	1.8	.06	2.34	.08	1.74	.07	2.1	.08
	7	2.31	.04	1.96	.20	1.68	.03	.77	.07	1.54	.03	.42	.06	1.96	.05	2.1	.05	2.73	.07	2.03	.12	2.45	.10
	8	2.64	.06	2.24	.17	1.92	.02	.88	.07	1.76	.01	.48	.01	2.24	.03	2.4	.05	3.12	.06	2.32	.08	2.8	.07
	9	2.97	.05	2.52	.09	2.16	.03	.99	.04	1.98	.01	.54	.01	2.52	.02	2.7	.03	3.51	.04	2.61	.06	3.15	.05
Right Bank		2.3	0	2.8	0	2.4	0	1.1	0	2.2	0	.6	0	2.8	0	3.0	0	3.9	0	2.9	0	3.5	0
Feature Type <small>(riffle, run, or pool)</small>		run		run		run		run		run		run		run		run		run		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: [Signature] Date: 10/4/07

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>6</u> Estimated Channel Incision: <u>.30</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM 01 UTM X: <u>165 0247263</u> UTM Y: <u>4062167</u> +/- <u>5</u> (meters) <u>24</u> 11 UTM X: <u>165 0247224</u> UTM Y: <u>4061986</u> +/- <u>5</u> (meters) <u>65</u> Average Stream Width: <u>1.5</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AWATH</u>	<b style="text-align: center;">Dissolved Oxygen Date: <u>10-4-07</u> Time: <u>14:58</u> Dissolved Oxygen: <u>9.10</u> (mg/L) Dissolved Oxygen: <u>118.9</u> (% sat) Specific Cond: <u>295</u> (µS/cm) Water Temperature: <u>29.19</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1		.24	.05	.22	.06	.13	.01			.11	.01	.21	.04			.12	.02			.11	.01	.04	.01
2		.48	.10	.44	.06	.26	.02			.22	.01	.42	.07			.24	.03			.22	.02	.08	.02
3		.72	.12	.66	.06	.39	.03			.33	.02	.63	.07			.36	.04			.33	.04	.12	.02
4		.96	.12	.84	.04	.52	.04			.44	.02	.84	.04			.48	.04			.44	.04	.16	.03
5		1.2	.12	1.1	.04	.65	.03			.55	.03	1.05	.0			.6	.02			.55	.05	.20	.02
6		1.44	.12	1.32	.04	.78	.02			.66	.06	1.26	.0			.72	.02			.66	.07	.24	.04
7		1.68	.10	1.44	.02	.91	.02			.77	.06	1.47	.03			.84	.03			.77	.11	.28	.03
8		1.92	.06	1.76	.02	1.04	.02			.88	.07	1.68	.08			.96	.03			.88	.08	.32	.03
9		2.16	.03	1.94	.02	1.17	.02			.99	.07	1.89	.10			1.08	.04			.99	.03	.36	.02
Right Bank		2.4	0	2.2	0	1.3	0			1.1	0	2.1	0			1.2	0			1.1	0	.40	0
Feature Type <small>(riffle, run, or pool)</small>		run		run		run		dry		run		run		dry		run		dry		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Andrew Wilson Date: 10/4/07

D127T-1
W 28T-11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>7</u> Estimated Channel Incision: <u>40</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>165 0247105</u> UTM Y: <u>4252849</u> +/- <u>5</u> (meters) <u>66</u> 11 UTM X: <u>165 0247106</u> UTM Y: <u>41058687</u> +/- <u>0</u> (meters) <u>67</u> Average Stream Width: <u>2.75</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AUJ+TH</u>	Dissolved Oxygen Date: <u>10-4-07</u> Time: <u>15:26</u> Dissolved Oxygen: <u>3.85</u> (mg/L) Dissolved Oxygen: <u>49.6</u> (% sat) Specific Cond: <u>334</u> (µS/cm) Water Temperature: <u>28.46</u> (°C)
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Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1		.28	.17	.31	.07	.42	.09	.39	.04	.38	.04							.28	.04	.17	.07	.41	.02
2		.56	.09	.62	.08	.84	.06	.78	.07	.76	.05							.56	.06	.34	.03	.82	.02
3		.84	.06	.93	.12	1.26	.12	1.17	.10	1.14	.03							.84	.07	.51	.04	1.23	.04
4		1.12	.07	1.24	.16	1.68	.10	1.56	.11	1.52	.03							1.12	.04	.68	.06	1.64	.09
5		1.4	.08	1.55	.20	2.1	.06	1.95	.12	1.9	.04							1.4	.03	.85	.07	2.05	.09
6		1.68	.14	1.86	.24	2.52	.0	2.34	.10	2.28	.04							1.68	.03	1.02	.10	2.46	.13
7		1.96	.12	2.17	.22	2.94	.02	2.73	.12	2.66	.03							1.96	.02	1.19	.11	2.87	.17
8		2.24	.11	2.48	.20	3.36	.06	3.12	.12	3.04	.07							2.24	.02	1.36	.10	3.28	.18
9		2.52	.05	2.79	.08	3.78	.06	3.51	.12	3.42	.08							2.52	.04	1.53	.09	3.69	.12
Right Bank		2.8	0	3.1	0	4.2	0	3.9	0	3.8	0	0	0	0	0	0	0	2.8	0	1.7	0	4.1	0
Feature Type <small>(riffle, run, or pool)</small>		run		run		run		run		run		dry		dry		dry		run		run		run	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: [Signature] Date: 10/4/07

Pics 29 + 30 delete

J-032 down T-1
J-031 Upstream T-11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

Waterbody ID: <u>3094</u> Site #: <u>8</u> Estimated Channel Incision: <u> </u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 01 UTM X: <u>1650246920</u> UTM Y: <u>4052653</u> +/- <u>5</u> (meters) ⁶⁹ 11 UTM X: <u>1650246934</u> UTM Y: <u>4052458</u> +/- <u>6</u> (meters) ⁶⁸ Average Stream Width: <u> </u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW</u>	Dissolved Oxygen Date: <u>10/4/07</u> Time: <u>16:35</u> Dissolved Oxygen: <u>dry</u> (mg/L) Dissolved Oxygen: <u>dry</u> (% sat) Specific Cond: <u>dry</u> (µS/cm) Water Temperature: <u>dry</u> (°C)
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Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
Right Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Feature Type <small>(riffle, run, or pool)</small>		<u>dry</u>																					

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: [Signature] Date: 10/4/07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

J-033 down T-1
J-034 up T-11

Waterbody ID: <u>3094</u> Site #: <u>9</u> Estimated Channel Incision: <u>—</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE/ PDOP / FOM) 01 UTM X: <u>16 50246940</u> UTM Y: <u>409 2414</u> +/- <u>6</u> (meters) <u>70</u> 11 UTM X: <u>16 50246952</u> UTM Y: <u>409 2218</u> +/- <u>6</u> (meters) <u>71</u> Average Stream Width: <u>— dry</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW + TH</u>	Dissolved Oxygen
	Date: <u>10/4/07</u> Time: <u>16:55</u>
	Dissolved Oxygen: <u>dry</u> (mg/L)
	Dissolved Oxygen: <u>dry</u> (% sat)
	Specific Cond: <u>dry</u> (µS/cm)
	Water Temperature: <u>dry</u> (°C)

Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1																							
2																							
3																							
4																							
5		dry						dry						dry				dry					
6		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
7				dry																			
8										dry													
9																							
Right Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type		dry	dry																				

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: Alexander W. Dehner Date: 10/4/07

J-035 Down T-1
J-036 up

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

<p>Waterbody ID: <u>3094</u> Site #: <u>10</u></p> <p>Estimated Channel Incision: <u> </u> (m) (height between low bank width and water)</p> <p>GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM)</p> <p>01 UTM X: <u>1650246923</u> UTM Y: <u>4049016</u> +/- <u>8</u> (meters) <u>72</u></p> <p>11 UTM X: <u>1650246920</u> UTM Y: <u>4048814</u> +/- <u>7</u> (meters) <u>73</u></p> <p>Average Stream Width: <u>dry</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width)</p> <p>Field Staff: <u>AW & TH</u></p>	Dissolved Oxygen
	Date: <u>10/4/07</u> Time: <u>17:09</u>
	Dissolved Oxygen: <u>dry</u> (mg/L)
	Dissolved Oxygen: <u>dry</u> (% sat)
	Specific Cond: <u>dry</u> (µS/cm)
	Water Temperature: <u>dry</u> (°C)

Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1																							
2																							
3																							
4																							
5		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
6		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
7																							
8																							
9																							
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Feature Type <small>(riffle, run, or pool)</small>		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
All measurements to be taken to the nearest 0.01 meter.

Signed: Alvin Zuberger Date: 10/4/07

J-037 Down T-1
J-038 Up T-11

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet C - Field Survey Results

Waterbody ID: 3074 Site #: 11

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

GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE/ PDOP / FOM)

01 UTM X: 11650246895 UTM Y: 40417451 +/- 5 (meters) 74

11 UTM X: 11650246885 UTM Y: 40417259 +/- 8 (meters) 75

Average Stream Width: dry (meters) Length of Survey Segment: 150 (meters)
(To determine Length of Reach) (20x average stream width)

Field Staff: TH + AW

Dissolved Oxygen

Date: 10/4/07 Time: 17:20

Dissolved Oxygen: dry (mg/L)

Dissolved Oxygen: dry (% sat)

Specific Cond: dry (µS/cm)

Water Temperature: dry (°C)

Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)																				
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type (riffle, run, or pool)	dry																					

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.
GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
All measurements to be taken to the nearest 0.01 meter.

Signed: [Signature] Date: 10/4/07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

J-039 Pwn T-1
J-040 Up T-11

Waterbody ID: <u>3094</u> Site #: <u>12</u> Estimated Channel Incision: <u>—</u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM 01 UTM X: <u>1650246812</u> UTM Y: <u>4044261</u> +/- <u>6</u> (meters) <u>76</u> 11 UTM X: <u>1650246809</u> UTM Y: <u>4044093</u> +/- <u>5</u> (meters) <u>77</u> Average Stream Width: <u>dry</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW + AW</u>	Dissolved Oxygen
	Date: <u>10/4/07</u> Time: <u>17:35</u> Dissolved Oxygen: <u>dry</u> (mg/L) Dissolved Oxygen: <u>dry</u> (% sat) Specific Cond: <u>dry</u> (µS/cm) Water Temperature: <u>dry</u> (°C)

Transect Cross-Section

		01		02		03		04		05		06		07		08		09		10		11	
Station		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1																							
2																							
3																							
4																							
5		dry																					
6		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
7				dry				dry															
8								dry															
9																							
Right Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type <small>(riffle, run, or pool)</small>		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: *Walter W. Singer* Date: 10/4/07

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C - Field Survey Results

J-041 Point-1
J-042 UPT-11

Waterbody ID: <u>3094</u> Site #: <u>13</u> Estimated Channel Incision: <u> </u> (m) (height between low bank width and water) GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE) / PDOP / FOM 01 UTM X: <u>16502416764</u> UTM Y: <u>40421626</u> +/- <u>5</u> (meters) <u>78</u> 11 UTM X: <u>1650246761</u> UTM Y: <u>4042442</u> +/- <u>5</u> (meters) <u>79</u> Average Stream Width: <u>dry</u> (meters) Length of Survey Segment: <u>150</u> (meters) (To determine Length of Reach) (20x average stream width) Field Staff: <u>AW & TH</u>	Dissolved Oxygen Date: <u>10/4/07</u> Time: <u>17:50</u> Dissolved Oxygen: <u>dry</u> (mg/L) Dissolved Oxygen: <u>dry</u> (% sat) Specific Cond: <u>dry</u> (µS/cm) Water Temperature: <u>dry</u> (°C)
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Transect Cross-Section

Station		01		02		03		04		05		06		07		08		09		10		11	
		Distance (m)	Depth (m)																				
Left Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1																							
2																							
3																							
4																							
5																							
6		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
7		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
8		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
9		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry		dry	
Right Bank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Feature Type <small>(riffle, run, or pool)</small>		dry	dry	dry																			

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width
 GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.
 Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)
 Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)
 All measurements to be taken to the nearest 0.01 meter.

Signed: *Alvin Z. Wilger* Date: 10/4/07

WBID# 3094



Site# 1 Photo ID# J-015, Downstream T-1



Site# 1 Photo ID# J-016, Upstream T-11



Site# 2 Photo ID# J-017, Downstream T-1



Site# 2 Photo ID# J-018, Upstream T-11

WBID# 3094



Site# 3 Photo ID# J-019, Downstream T-1



Site# 3 Photo ID# J-020, Upstream T-11



Site# 4 Photo ID# J-021, Downstream T-1



Site# 4 Photo ID# J-022, Upstream T-11

WBID# 3094



Site# 5 Photo ID# J-023, Downstream T-1



Site# 5 Photo ID# J-024, Upstream T-11



Site# 6 Photo ID# J-025, Downstream T-1



Site# 6 Photo ID# J-026, Upstream T-11

WBID# 3094



Site# 7 Photo ID# J-027, Downstream T-1



Site# 7 Photo ID# J-028, Upstream T-11



Site# 8 Photo ID# J-032, Downstream T-1



Site# 8 Photo ID# J-031, Upstream T-11

WBID# 3094



Site# 9 Photo ID# J-033, Downstream T-1



Site# 9 Photo ID# J-034, Upstream T-11



Site# 10 Photo ID# J-035, Downstream T-1



Site# 10 Photo ID# J-036, Upstream T-11

WBID# 3094



Site# 11 Photo ID# J-037, Downstream T-1



Site# 11 Photo ID# J-038, Upstream T-11



Site# 12 Photo ID# J-039, Downstream T-1



Site# 12 Photo ID# J-040, Upstream T-11

WBID# 3094



Site# 13 Photo ID# J-041, Downstream T-1



Site# 13 Photo ID# J-042, Upstream T-11

Weather Conditions

Weather conditions ten days previous to stream assessment are listed in the tables below. The date(s) that the stream was assessed are shaded.

Data from the Midwest Regional Climate Center
Poplar_Bluff, Missouri - Station ID: 236791

Date	Precipitation (Inches)	Min. Temp (°F)	Max. Temp (°F)	Avg. Temp (°F)
9/24/2007	0.16	70	91	81
9/25/2007	0.00	72	89	81
9/26/2007	0.14	71	89	80
9/27/2007	0.33	64	72	68
9/28/2007	0.07	60	79	70
9/29/2007	0.00	60	85	73
9/30/2007	0.00	57	87	72
10/1/2007	0.00	68	83	76
10/2/2007	0.00	62	86	74
10/3/2007	0.00	64	83	74
10/4/2007	0.00	63	80	72