Missouri
Department of
Natural Resources

Use Attainability Analysis

for

WBID 1870 Spring Branch

Submitted by
Missouri Department of Natural Resources Staff

To
Missouri Department of Natural Resources
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad): Spring Branch
8-digit HUC: 07140102
Missouri WBID #: 1870
County: Dent
Upstream Legal Description:
Downstream Legal Description:
Upstream Coordinates:
Downstream Coordinates:
Discharger Facility Name(s): Salem WWTF, Adams Subd Asoc Inc, Seville Care Center, Salem Hospital
Discharger Permit Number(s): MO-0021768, MO-0083984, MO-0089974, MO-0087076
Number of Sites Evaluated: (1870-01, 1870-02, 1870-03, 1870-04, 1870-04B, 1870-05, 1870-06)
Name of Surveyor and Telephone Number: Priscilla Stotts, 573-526-3406
Organization: Missouri Department of Natural Resources
Position: Stream Team Coordinator

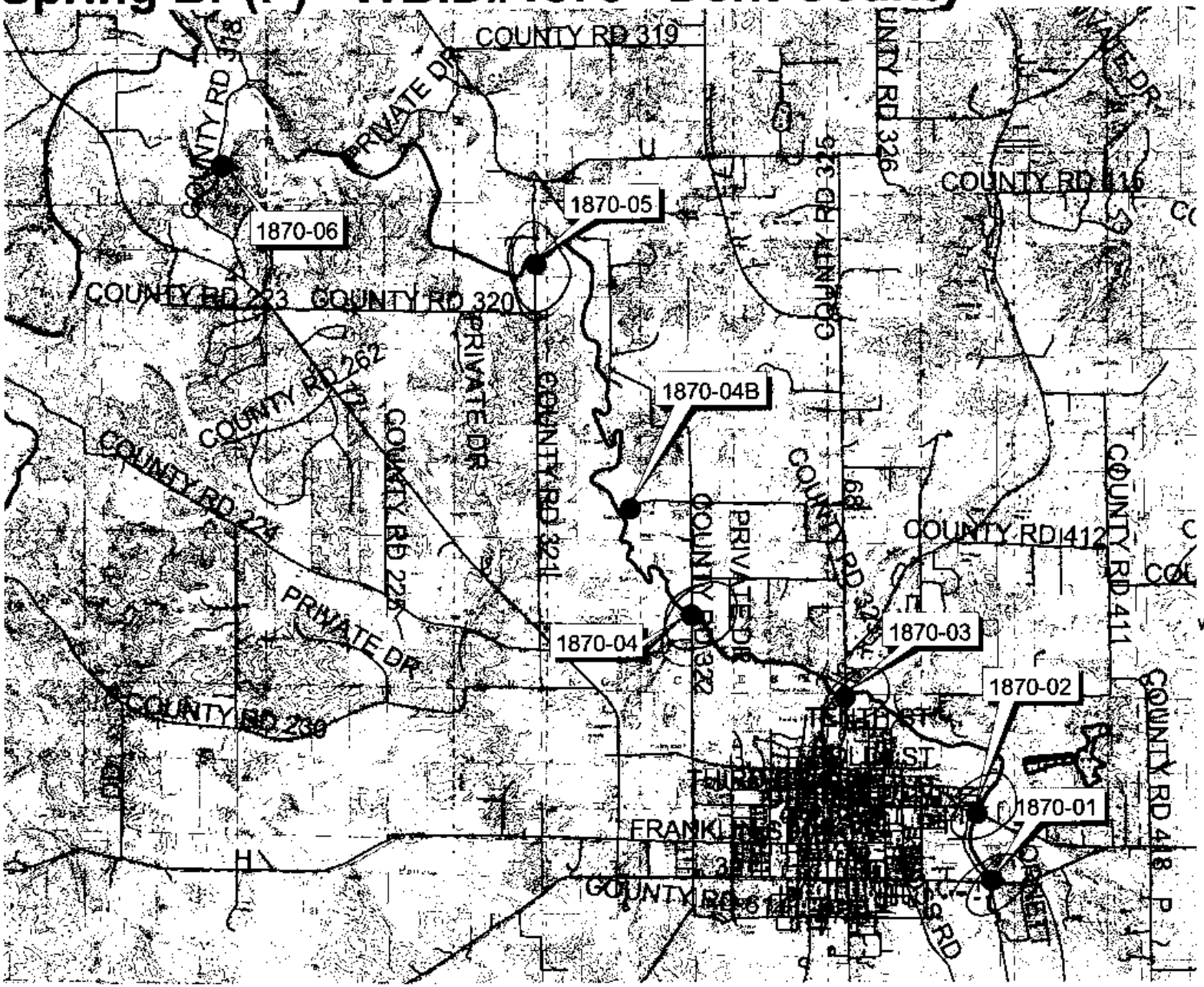
I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Priscilla Stotts **Date:** May 13, 2005

Did not do 1870-04B or 1870-06

Spring Br (P) WBID#1870 Dent County

0.4 0 0.4 0.8 Miles



Roads
Classified Waters
Countybnd

This map is for general purposes and is not intended to be completely accurate. Should one need specifics on a certain water, contact the Missouri Department of Resources, Water Protection Program at (573) 751-1300 or (800) 361-4827.
May 2005

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

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

Missouri WBID #: 1870.01	Site Location Description: Spring Branch, Class P, Dent County In the Salem City Limits
Site GPS Coordinates:	
Date & Time: May 13 8:10 a.m	Facility Name: Salem WWTF, Adams Subd. Asoc. Inc, Seville Care Center, Salem Memorial Dist Hospital
Personnel: Priscilla Stotts	Permit Number: MO-0021768, MO-0083984, MO-0089974, MO-0087076
Current Weather Conditions: Clear	Weather Conditions for Past 7 days:
Photo Ids: Upstream: / Downstream:	Other: No place to Take a photo Busy Hwy Traffic

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

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

Evidence of Human Use*:

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

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

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1870, Spring Branch:

Stream Morphology: 187001

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☑ Run	Width (ft): 3	Length (ft):	Avg. Depth (ft): <1'	Max. Depth (ft): <1'
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☑ Flow	Present? ☑ Yes ☐ No		Estimated (ft^3/sec): 0.34 to 0.4	

Downstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Flow	Present? ☐ Yes ☐ No		Estimated (ft^3/sec):	

Could not see the creek - too much Traffic

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

% Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock

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

the stream is clogged with willow + grass

Water Characteristics*: (Mark all that apply.)

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

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

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

Signed: Priscilla Stotts **Date:** May 13, 2005

Organization: MO DNR Position: Corr III

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

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

Missouri WBID #: 1870 . 02		Site Location Description: Spring Branch, Class P, Dent County
Site GPS Coordinates:		
Date & Time: May 13, 8:35		Facility Name: Salem WWTF, Adams Subd. Asoc. Inc, Seville Care Center, Salem Memorial Dist Hospital
Personnel: Priscilla Stotts		Permit Number: MO-0021768, MO-0083984, MO-0089974, MO-0082076
Current Weather Conditions: clear		Weather Conditions for Past 7 days: fair
Photo Ids: Upstream: X	Downstream:	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

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

Evidence of Human Use*:

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

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

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I took picture of upstream
pool formed do to low water crossing
on paved street

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1870, Spring Branch:

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☑ Pool	Width (ft): ~ 15'	Length (ft): 60'	Avg. Depth (ft): .8'	Max. Depth (ft): 1ft
☑ Flow	Present? ☐ Yes ☐ No Very slow		Estimated (ft^3/sec): 0.3/4 cfs	

Downstream View Physical Dimensions:

☑ Riffle	Width (ft): 3	Length (ft): 4'	Avg. Depth (ft): 4/10'	Max. Depth (ft): 5/10'
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☑ Flow	Present? ☑ Yes ☐ No		Estimated (ft^3/sec): 0.3/4 cfs	

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

% Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock
10 % Boulder	30			30	30

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

Algae mat - 50%
& grass 5%

Water Characteristics*: (Mark all that apply.)

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

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

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

Signed: Priscilla Stutts **Date:** 5-13-05

Organization: MO DNR Position: Env III

1870_0002_US

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

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

Missouri WBID #: 1870 . 0 3	Site Location Description: Spring Branch, Class P, Dent County
Site GPS Coordinates:	
Date & Time: May 13 8:55	Facility Name: Salem WWTF, Adams Subd. Asoc. Inc, Seville Care Center, Salem Memorial Dist Hospital
Personnel: Priscilla Stotts	Permit Number: MO-0021768, MO-0083984, MO-0089974, MO-0087076
Current Weather Conditions: Clear / PC.	Weather Conditions for Past 7 days: fair - little rain
Photo Ids: Upstream: X 9:05 Downstream: X first Other:	

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☐ None of the above	☒ Other: NA

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☒ NA County parks	☐ Playgrounds	☐ MDC conservation lands	☒ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

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

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

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1870, Spring Branch:

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 20	Length (ft): 80	Avg. Depth (ft): ~8"	Max. Depth (ft): 1 ft
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft^3/sec): 0.5 - 1 cfs	

Downstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 15	Length (ft): 50	Avg. Depth (ft): ~1'	Max. Depth (ft): 1'
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft^3/sec): 0.5 - 1 cfs	

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

25 % Cobble	25 % Gravel	25 % Sand	25 % Silt	% Mud/Clay	% Bedrock

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

50% algae close growing in unshaded areas 50% of stream bottom

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:	
Color:	☒ Clear	☒ Green	☐ Gray	☐ Milky	☐ Other:	Could not Tell
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:	
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:	

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

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

Signed: Priscilla Stotts **Date:** 5-13-05

Organization: MO DNR Position: Env III

1870_003_DS

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

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

Missouri WBID #: 1870 . 04		Site Location Description: Spring Branch, Class P, Dent County
Site GPS Coordinates:		
Date & Time: May 13 2005 9135		Facility Name: Salem WWTF, Adams Subd. Asoc. Inc, Seville Care Center, Salem Memorial Dist Hospital
Personnel: Priscilla Stotts		Permit Number: MO-0021768, MO-0083984, MO-0089974, MO-0087076
Current Weather Conditions: Partly Cloudy		Weather Conditions for Past 7 days: Fair No rain
Photo Ids: Upstream:	Downstream: 9:45	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☑ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

See Data Sheet D

Empire Gas Employees told me this site is used by kids from Salem

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☐ Steep slopes	☑ Other: Farm Buildings close by	

Evidence of Human Use*:

☑ Roads	☐ Foot paths/prints	☐ Dock/platform	☑ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☐ Other: old bridge supports, bicycle riding path				

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

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1870, Spring Branch:

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 30	Length (ft): 100+	Avg. Depth (ft): 1'	Max. Depth (ft): 1.5'
☑ Flow	Present? ☐ Yes ☐ No		Estimated (ft^3/sec): 3 cfs	

Downstream View Physical Dimensions:

☒ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 15	Length (ft): 40	Avg. Depth (ft): 1 1/2'	Max. Depth (ft): 2
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft^3/sec):	

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

20 % Cobble	10 % Gravel	% Sand	30 % Silt	40 % Mud/Clay	% Bedrock

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

30% close growing
3% Coon Tail

Water Characteristics*: (Mark all that apply.)

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

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

Creek water smells of sewage stronger than at site .03

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

Signed: Priscilla Stotts **Date:** 5-13-05

Organization: MO - DNR Position: Env III

1870_004_DS

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

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

Missouri WBID #: 1870.05		Site Location Description: Spring Branch, Class P, Dent County
Site GPS Coordinates:		
Date & Time: May 13, 05 10:10		Facility Name: Salem WWTF, Adams Subd. Asoc. Inc, Seville Care Center, Salem Memorial Dist Hospital
Personnel: Priscilla Stotts		Permit Number: MO-0021768, MO-0083984, MO-0089974, MO-0087076
Current Weather Conditions: Partly Cloudy		Weather Conditions for Past 7 days: Fair
Photo Ids: Upstream: 10:20	Downstream:	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

People taking wood

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

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

Evidence of Human Use*:

☒ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☐ Other: Livestock crossing				

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

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two – WBID #1870, Spring Branch:

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Run	Width (ft): 10	Length (ft): 12	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 25	Length (ft): 45-50	Avg. Depth (ft): 1	Max. Depth (ft): 1
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft^3/sec): 3.3 cfs	

Downstream View Physical Dimensions:

☒ Riffle	Width (ft): 10	Length (ft): 15	Avg. Depth (ft): ~~10~~ 1 ft	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): 18	Length (ft): 20	Avg. Depth (ft): > 2'	Max. Depth (ft): > 2.5'
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft^3/sec): 3.0 – 3.5	

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

10 % Cobble	60 % Gravel	X % Sand	30 % Silt	% Mud/Clay	% Bedrock

Hard To Tell how much Sand

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

Close growing algae 90% of stream substrate

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☒ Musky	☐ Chemical	☐ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☒ Foam 0.5%	☐ None	☐ Other:

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

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

Signed: Priscilla Stotts **Date:** 5-13-05

Organization: MO DNR Position: Env. III

1870_005_US