

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Fink Run	
Waterbody ID: SUPA001		Date: 6/23/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): Highway 33 ROW, 03-27		Nearest Milepost: 22.0	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>10.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: <u>2.5</u> ft.		<input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input checked="" type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>16.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>7.0</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>9.0</u> ft.	Depth of Water: <i>(Approx.)</i> <u>2.0</u> ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>2.0</u> fps	Bank height Right: <u>4.0</u> ft. Left: <u>4.0</u> ft.	Bank slope Right: <u>60</u> degrees Left: <u>65</u> degrees
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>		
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% <u>5</u> % <u>5</u> % <u>10</u> % <u>80</u> % ___% ___%			
Width of Riparian Zone: <u>35</u> ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input type="checkbox"/>		<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
		Avg. DBH of Dominants: <i>(approx.)</i> <u>7.0</u> in. <u>0.50</u> in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Sycamore, black willow, boxelder, multiflora rose, Morrow's honeysuckle, autumn olive, stiltgrass, reed grass, wingstem			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Pools, riffles, wrack piles in channel, overhanging roots and banks			
Aquatic Organisms Observed <i>(list)</i> : Frogs			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Parallels highway 33 at the base of road fill, somewhat channelized as a result			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

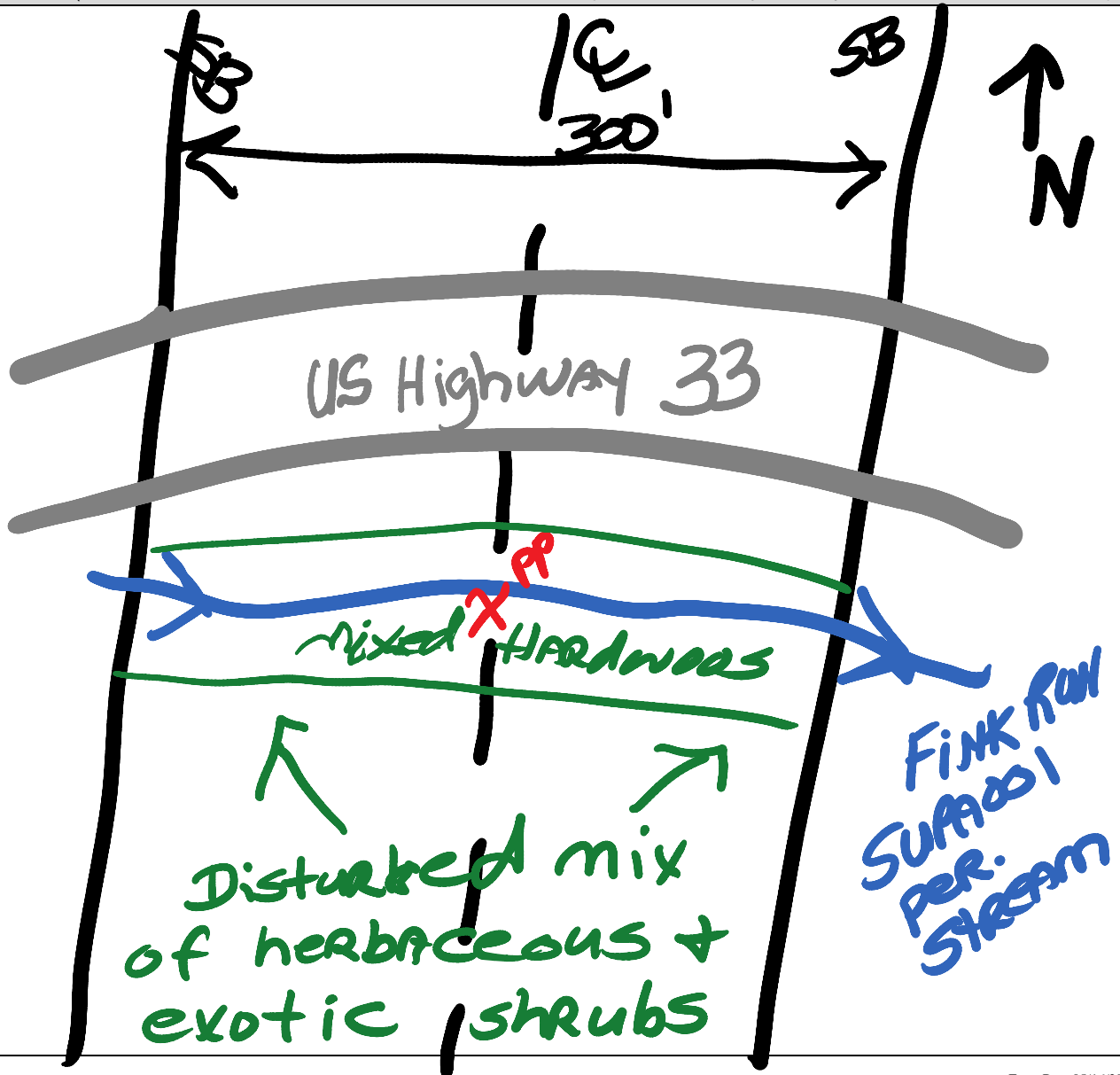
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Fink Run, continues out of corridor in both directions

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA001 facing west upstream



Waterbody SUPA001 facing east downstream



Waterbody SUPA001 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Fink Run	
Waterbody ID: SUPA002		Date: 6/23/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-031, 03-033		Nearest Milepost: 22.7	Associated Wetland ID(s): WUPA001
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>3.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: <u>1.25</u> ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>4.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>2.5</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>2.5</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>1.0</u> ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>1.0</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>2.5</u> ft. Left: <u>2.5</u> ft.	Bank slope Right: <u>85</u> degrees Left: <u>75</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% _____% <u>5</u> % <u>5</u> % <u>10</u> % <u>80</u> % ___% ___%			
Width of Riparian Zone: ____ ft. N/A <input checked="" type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i>		
	<input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
	Avg. DBH of Dominants: <i>(approx.)</i> _____ in. <u>0.50</u> in. _____ in.		
Dominant Bank Vegetation <i>(list)</i> : black willow, multiflora rose, Morrow's honeysuckle, autumn olive, cattail, reed grass, agrimony, soft rush			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Pools, emergent vegetation			
Aquatic Organisms Observed <i>(list)</i> : Frogs			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Heavy impact by cattle, manure in stream			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

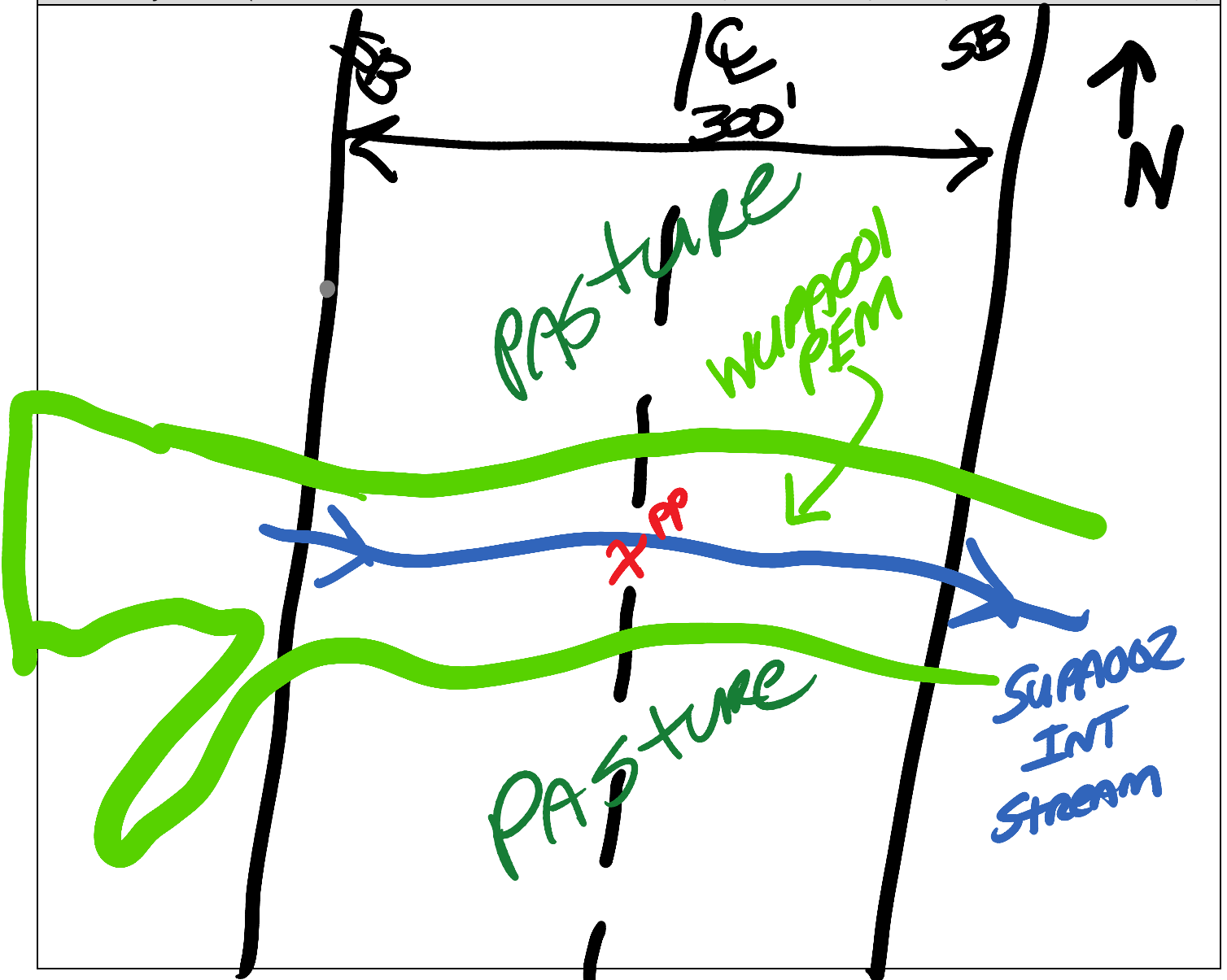
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to Fink Run, continues out of corridor in both directions, runs through PEM wetland WUPA001

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA002 facing west upstream



Waterbody SUPA002 facing east downstream



Waterbody SUPA002 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Brushy Fork	
Waterbody ID: SUPA004		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-034		Nearest Milepost: 23.0	Associated Wetland ID(s): Outflow from wetland WUPA002
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.75 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 4.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1.0 ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input checked="" type="checkbox"/> ___ft.	Depth of Water: <i>(Approx.)</i> N/A <input checked="" type="checkbox"/> ___ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> ___fps N/A <input checked="" type="checkbox"/>	Bank height Right: 3.5 ft. Left: 3.5 ft.	Bank slope Right: 90 degrees Left: 90 degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input checked="" type="checkbox"/> No water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: 10 % ___ % 35 % 25 % 15 % 15 % ___ % ___ %			
Width of Riparian Zone: ___ft. N/A <input checked="" type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> 11.0 in. 0.75 in. ___ in.			
Dominant Bank Vegetation <i>(list)</i> : Black locust, red oak, boxelder, multiflora rose, Morrow's honeysuckle, autumn olive, poison ivy, jewelweed, deertongue			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Livestock access			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPA004

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

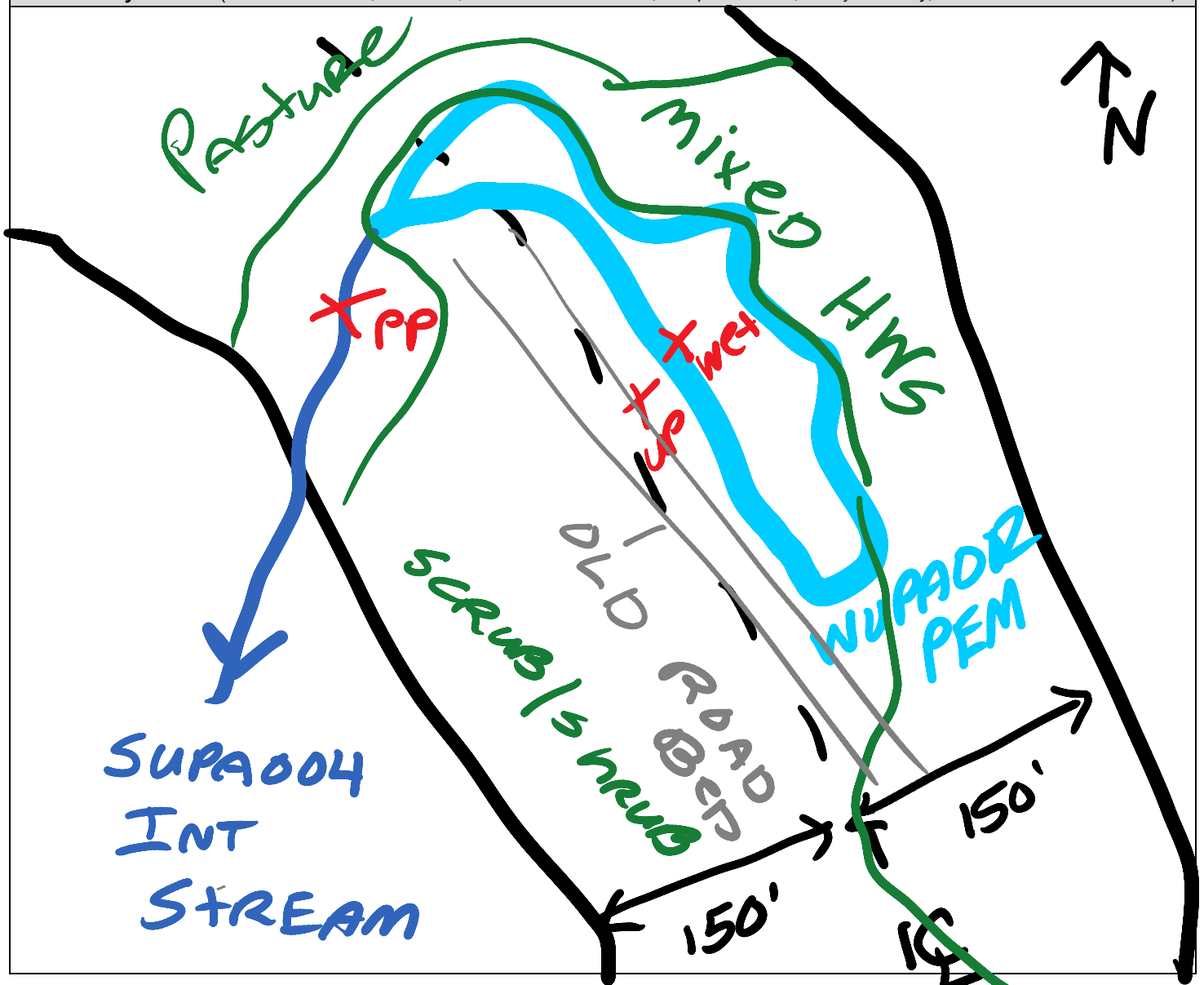
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to Brushy Fork, downstream continues out of corridor, origin as outflow of WUPA002; borderline call as to whether feature is ephemeral or intermittent.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA004 facing north upstream



Waterbody SUPA004 facing south downstream



Waterbody SUPA004 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Brushy Fork	
Waterbody ID: SUPA003		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-034		Nearest Milepost: 23.35	Associated Wetland ID(s): Fringe wetland
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>2.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: <u>0.5</u> ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>6.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1.0</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>1.5</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.33</u> ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>0.5</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>3.5</u> ft. Left: <u>3.0</u> ft.	Bank slope Right: <u>40</u> degrees Left: <u>40</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: ___% ___% ___% ___% <u>20</u> % <u>80</u> % ___% ___%			
Width of Riparian Zone: <u> </u> ft. N/A <input checked="" type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
	Avg. DBH of Dominants: <i>(approx.)</i> ___ in. ___ in. ___ in.		
Dominant Bank Vegetation <i>(list)</i> : soft rush, orchardgrass, fescue, flat sedge, blackberry, timothy grass, red clover			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Appears to have been channelized, culvert crossing at centerline			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

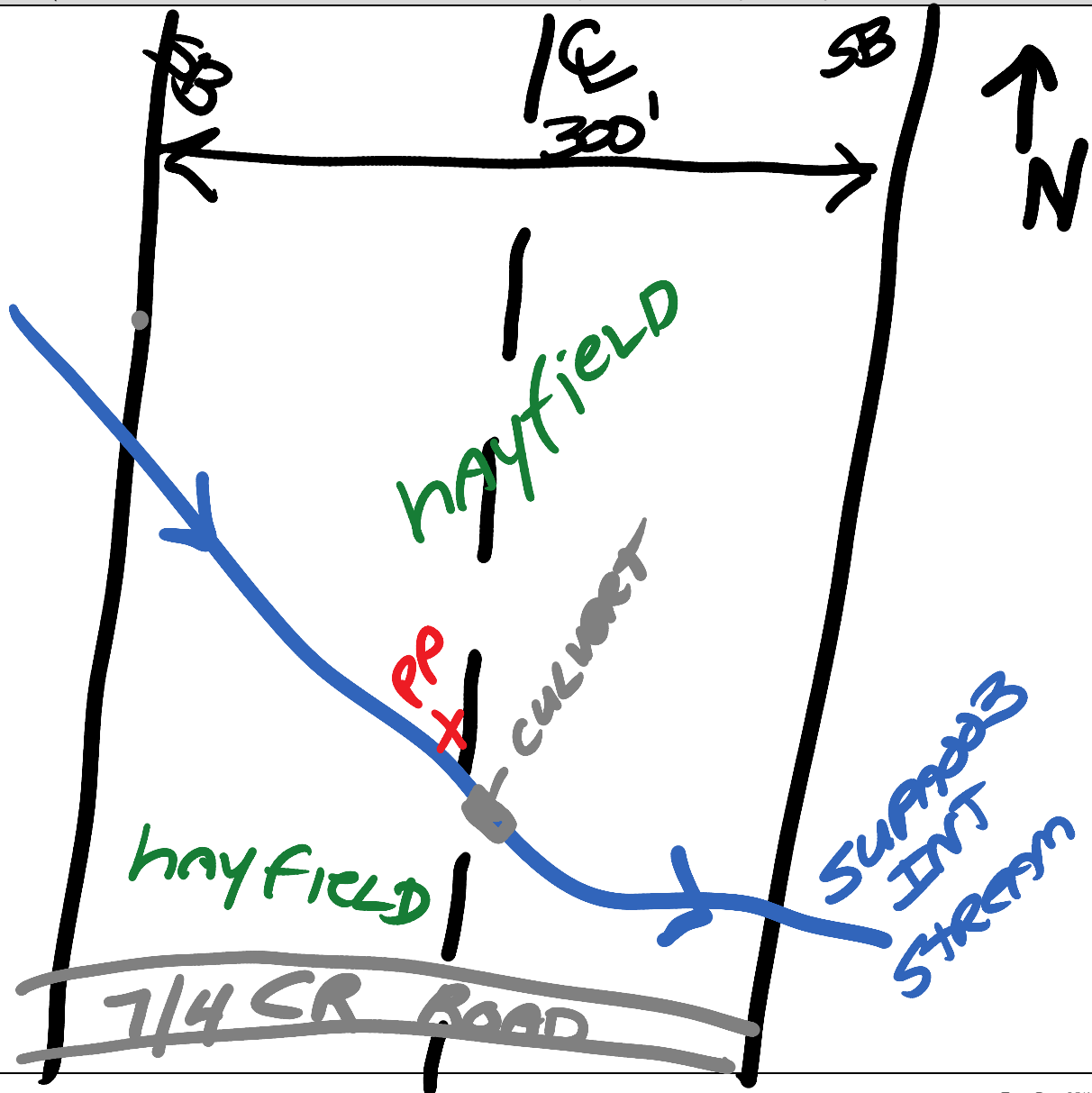
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to Brushy Fork, continues out of corridor in both directions

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA003 facing north upstream



Waterbody SUPA003 facing south downstream



Waterbody SUPA003 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Brushy Fork	
Waterbody ID: SUPA005		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-034		Nearest Milepost: 23.4	Associated Wetland ID(s): WUPA003
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>2.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: <u>1.0</u> ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>3.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1.5</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>2.0</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.75</u> ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>0.5</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>2.5</u> ft. Left: <u>2.5</u> ft.	Bank slope Right: <u>40</u> degrees Left: <u>35</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% _____% _____% _____% <u>20</u> % <u>80</u> % _____% _____%			
Width of Riparian Zone: <u> </u> ft. N/A <input checked="" type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
	Avg. DBH of Dominants: <i>(approx.)</i> _____in. _____in. _____in.		
Dominant Bank Vegetation <i>(list)</i> : soft rush, orchardgrass, fescue, flat sedge, blackberry, timothy grass, red clover			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Appears to have been channelized; livestock access			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

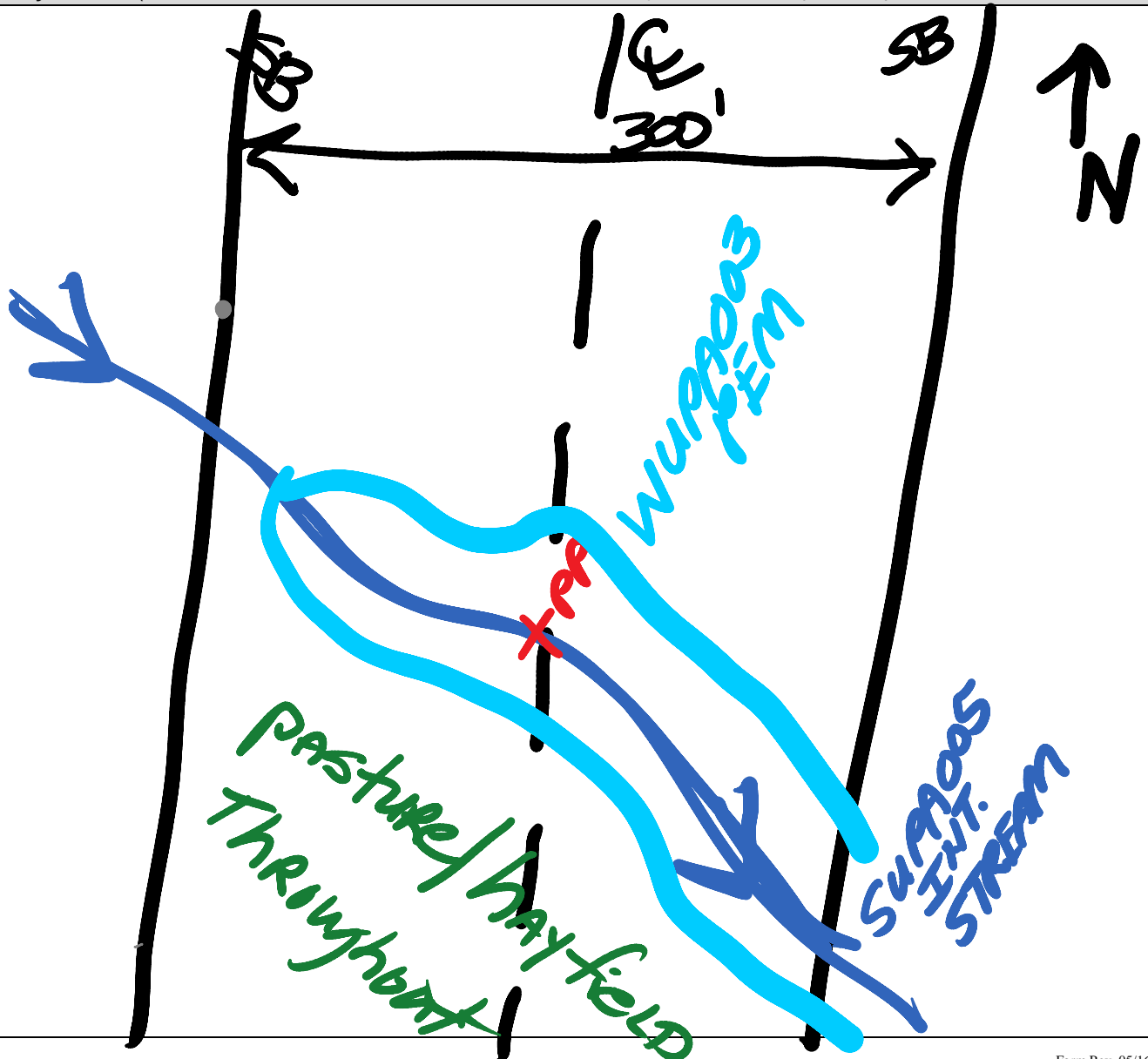
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to Brushy Fork, continues out of corridor in both directions; flows through WUPA003

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA005 facing northwest upstream



Waterbody SUPA005 facing southeast downstream



Waterbody SUPA005 facing northeast across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Brushy Fork	
Waterbody ID: SUPB001		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 3			
Tract Number(s): 03-047		Nearest Milepost: 24.05	Associated Wetland ID(s): WUPB001e
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>1</u> ft.		OHWM Indicator: <i>(check all that apply)</i> <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: <u>0.75</u> ft.		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>1.25</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>0.75</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>0.75</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.4</u> ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>1</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>1.5</u> ft. Left: <u>1.5</u> ft.	Bank slope Right: <u>90</u> degrees Left: <u>90</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% <u>100</u> % _____% _____%			
Width of Riparian Zone: _____ ft.	Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
N/A <input checked="" type="checkbox"/>	Avg. DBH of Dominants: <i>(approx.)</i> _____ in. <u>2</u> in. _____ in.		
Dominant Bank Vegetation <i>(list)</i> : Carex sp., scrips, Juncus sp., maple, orchardgrass, fescue			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none, stream is channelized and flows through a wetland in the middle of a hay field / pasture			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Located in pasture, possibly for grazing. Slightly incised, one long run			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB001

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

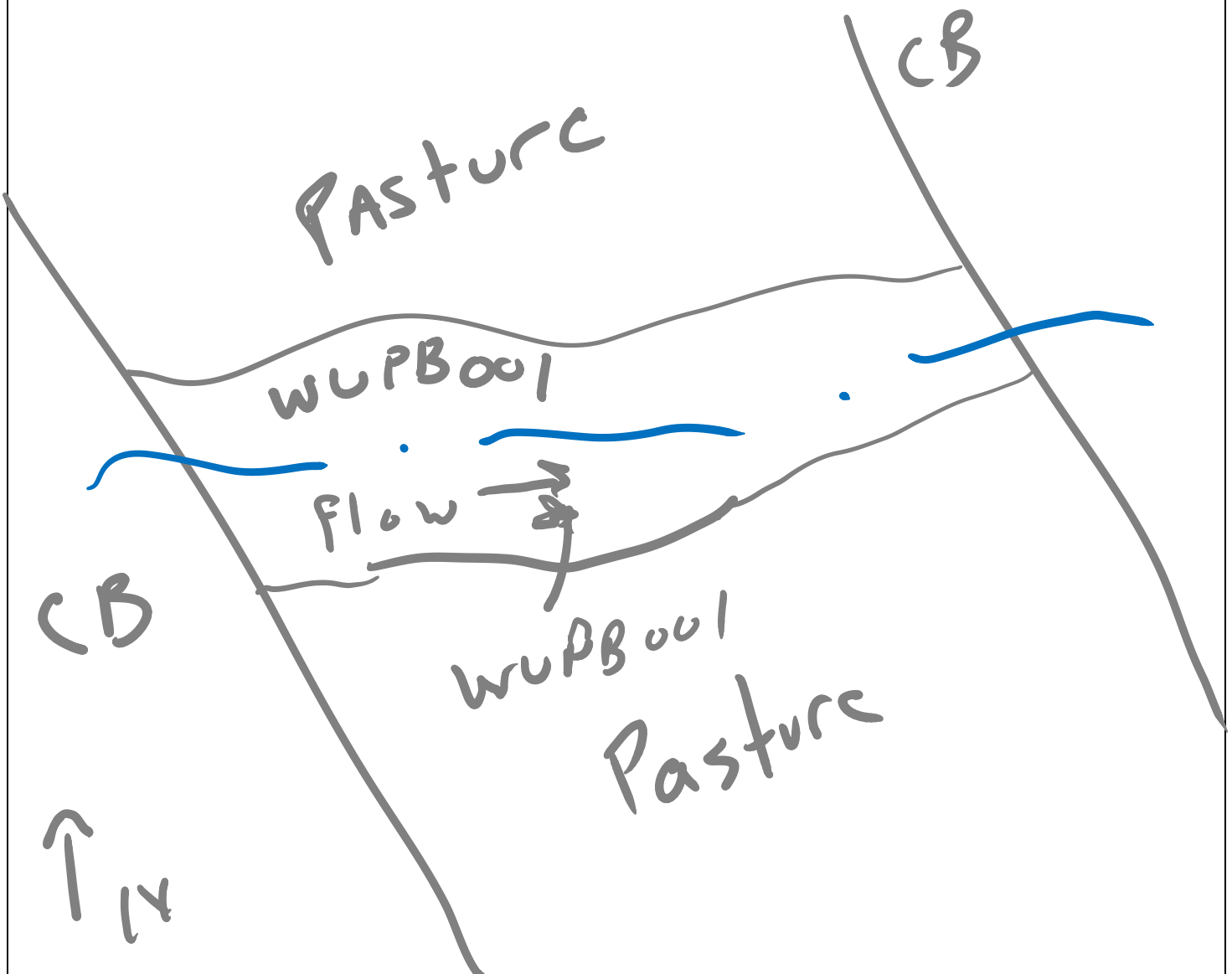
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Intermittent stream associated with wetland WSUB001e, located in hay field.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB001 facing west upstream



Waterbody SUPB001 facing east downstream



Waterbody SUPB001 facing south across



Waterbody SUPB001 facing west upstream



Waterbody SUPB001 facing east downstream



Waterbody SUPB001 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Brushy Fork	
Waterbody ID: SUPB102		Date: 8/6/2014	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: TP, SK
Photos: 01-03			
Tract Number(s): 03-047		Nearest Milepost: 24.0	Associated Wetland ID(s): WUPB102
Survey Type: <i>(check one)</i> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.75 ft.		<input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving	
N/A <input type="checkbox"/>		<input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
<input type="checkbox"/> Bent, matted, or missing vegetation		<input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris	
<input type="checkbox"/> Abrupt plant community change		<input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 4.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1.0 ft.	Width of Waterbody - Water Edge to Water Edge: 1.0 ft.	Depth of Water: <i>(Approx.)</i> 0.25 ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> 1.0 fps N/A <input type="checkbox"/>	Bank height Right: 5 ft. Left: 5 ft.	Bank slope Right: 75 degrees Left: 75 degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> % of Substrate: _____% _____% _____% _____% _____% <u>100</u> % _____% _____%			
Width of Riparian Zone: 5.0 ft. N/A <input type="checkbox"/>		Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: Avg. DBH of Dominants: <i>(approx.)</i> ___ in.	
<input checked="" type="checkbox"/> Saplings/Shrubs:		<input checked="" type="checkbox"/> Herbs	
Dominant Bank Vegetation <i>(list)</i> : Stream is located in a hay field. Tag alder, impatiens, deer tongue, and fescue are rooted along stream bank.			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): A few roots along bank and vegetation along bank. Stream has been straightened and ditched for agriculture.			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Stream has been straightened and ditched for agriculture (hay field)			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ^a : <i>(check one)</i> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

SUPB102

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

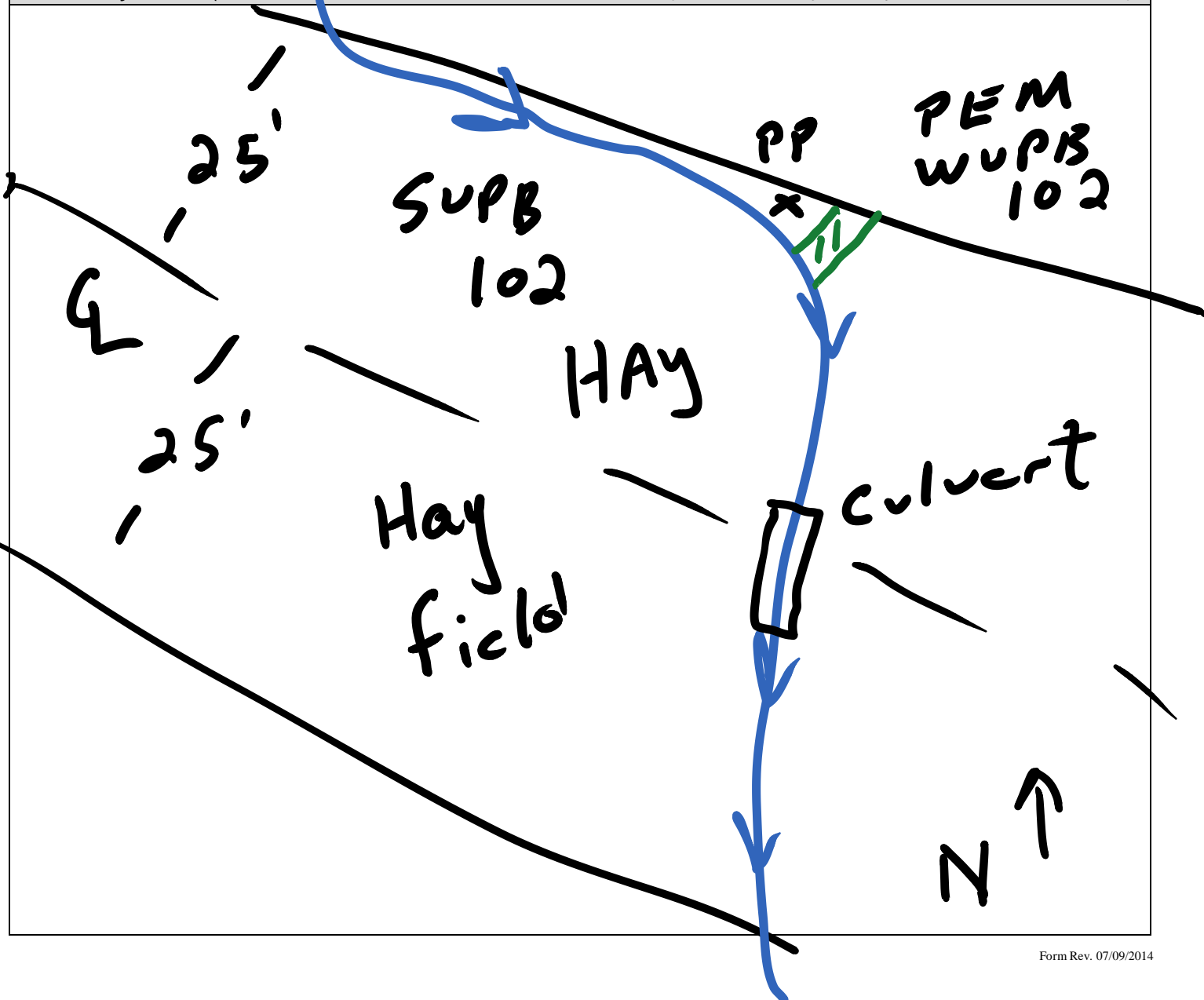
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

As stated above, little aquatic habitat remains due to the stream being straightened/ditched for agriculture.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB102 facing northwest upstream



Waterbody SUPB102 facing southeast downstream



Waterbody SUPB102 facing southwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to Brushy Fork	
Waterbody ID: SUPB003		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 3			
Tract Number(s): 03-048		Nearest Milepost: 24.4	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>2.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i> <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: <u>0.75</u> ft.		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>4</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1.5</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>1.0</u> ft.	Depth of Water: <i>(Approx.)</i> <u>0.25</u> ft.
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> <u>0.5</u> fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: <u>4.0</u> ft. Left: <u>4.0</u> ft.		Bank slope Right: <u>90</u> degrees Left: <u>90</u> degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% <u>100</u> % _____% _____%			
Width of Riparian Zone: <u>_____</u> ft.		Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
N/A <input checked="" type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> <u>__</u> in. <u>__</u> in. <u>__</u> in.	
Dominant Bank Vegetation <i>(list)</i> : Fescue			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none, stream is channelized, roadside ditch			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Ditch with flowing water, drains into SUSB002			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

SUPB003

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

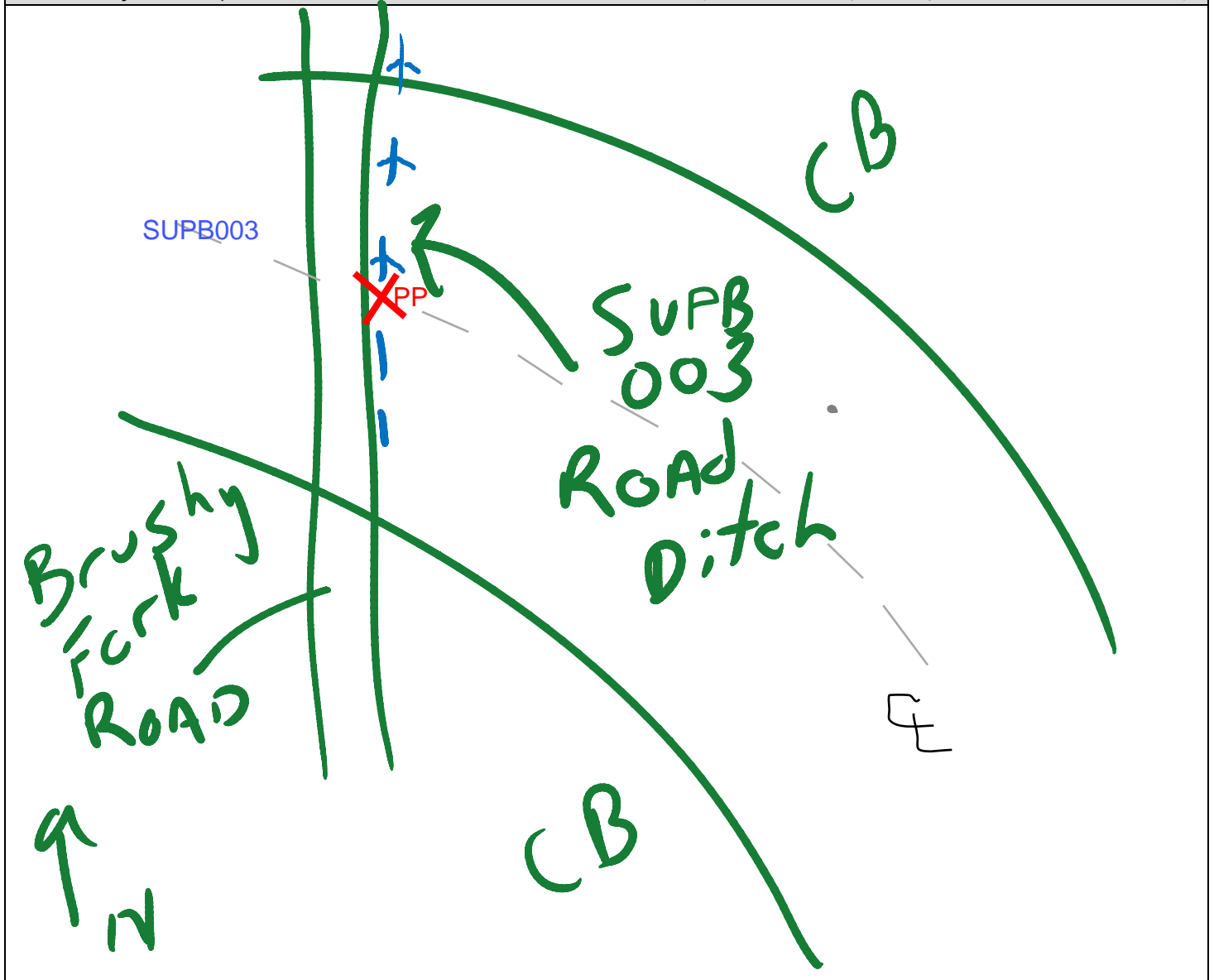
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Roadside ditch

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB003 facing southwest upstream



Waterbody SUPB003 facing northeast downstream



Waterbody SUPB003 facing northwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Brushy Fork	
Waterbody ID: SUPB002		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 3			
Tract Number(s): 03-048, 03-050		Nearest Milepost: 24.4	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i> <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: 1.0 ft.		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 10 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2.0 ft.	Width of Waterbody - Water Edge to Water Edge: 2.0 ft.	Depth of Water: <i>(Approx.)</i> 0.5 ft.
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 8 ft. Left: 8 ft.		Bank slope Right: 80 degrees Left: 80 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% 50% 50% _____% _____%			
Width of Riparian Zone: _____ ft.		Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input type="checkbox"/> Herbs	
N/A <input checked="" type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> _____ in. 1 in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Silky dogwood, orchardgrass, fescue, red clover			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none, stream is channelized and flows the middle of a hay field / pasture; there are a few dogwood trees hanging over creek			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Located in pasture, possibly for grazing; deeply incised, ditched, and straightened			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB002

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

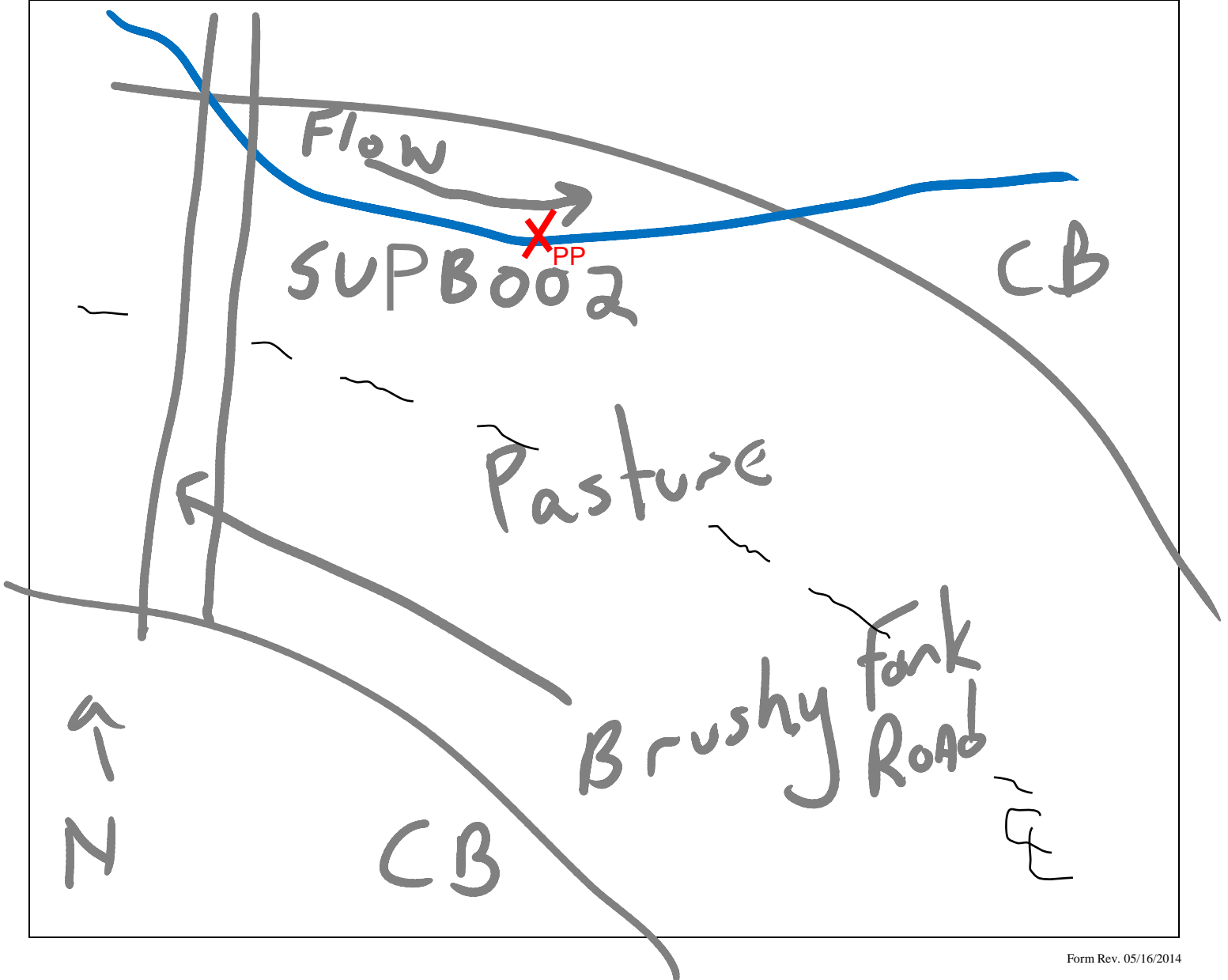
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Stream is culverted under road

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB002 facing west upstream



Waterbody SUPB002 facing east downstream



Waterbody SUPB002 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Brushy Fork	
Waterbody ID: SUPC102		Date: 4/15/2016	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): Contractor Yard #1		Nearest Milepost:	Associated Wetland ID(s): None
Survey Type: <i>(check one)</i> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Other: Contractor Yard			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: _ 3 _ ft.		OHWM Indicator: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
Height: _ 0.5 _ ft.		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: _ 10 _ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _ 1 _ ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> _ 2 _ ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> _ 0.3 _ ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _ 1 _ fps N/A <input type="checkbox"/>	Bank height Right: _ 3 _ ft. Left: _ 3 _ ft.	Bank slope Right: _ 70 _ degrees Left: _ 70 _ degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____ % _____ % _____ % _____ % <u>10</u> % <u>90</u> % _____ % _____ %			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> _____ ft.	Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> _____ in. _____ in.			
Dominant Bank Vegetation <i>(list)</i> : Red fescue, juncus effuses, red clover, danilion			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): None			
Aquatic Organisms Observed <i>(list)</i> : None			
T&E Species Observed <i>(list)</i> : None			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Cattle access, flows under branchy fork road			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

SUPC102

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

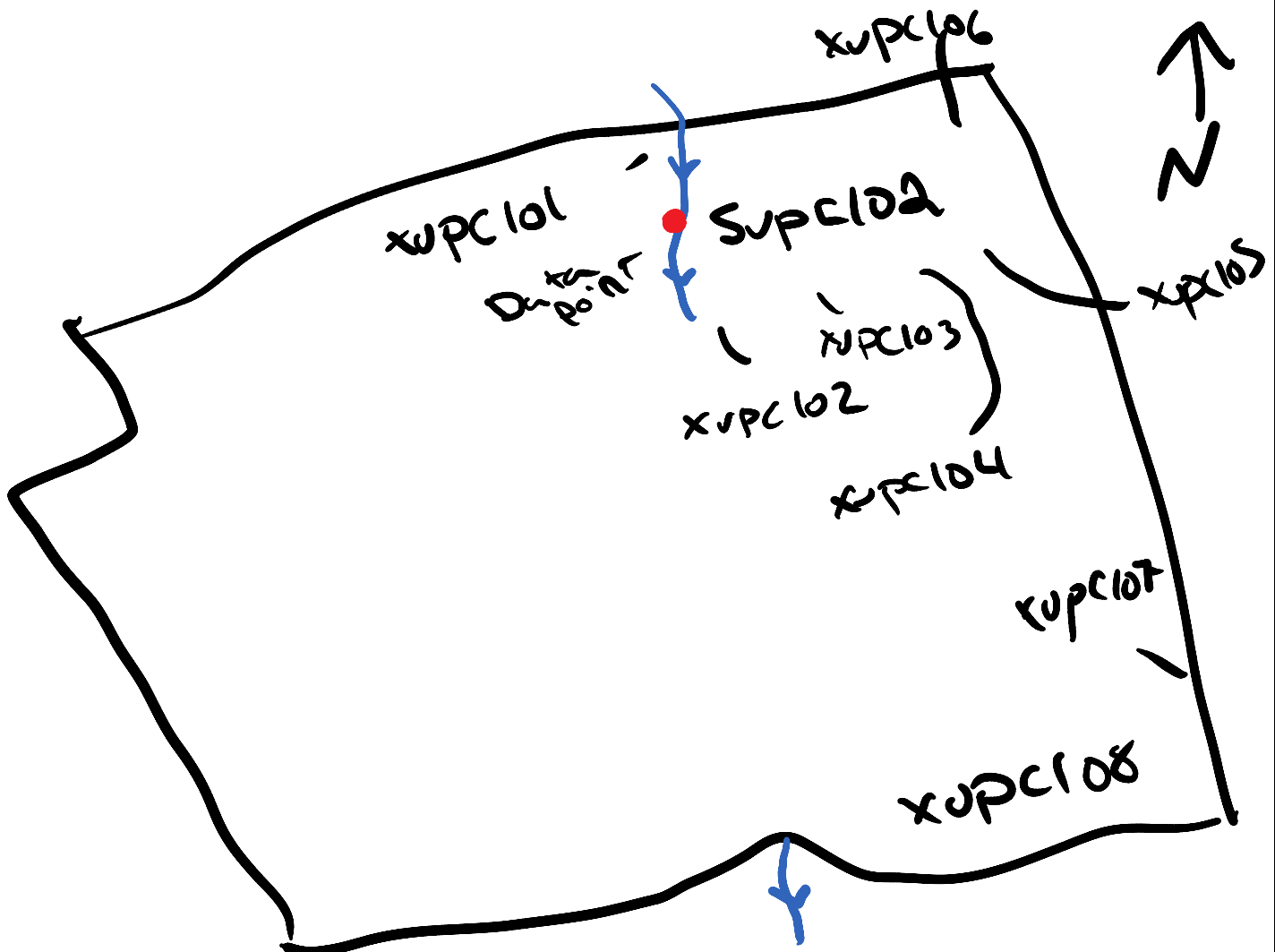
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Stream flows under brushy fork road and through a cattle pasture. Fringe wetland is present around the stream. Stream appears to flow through a pipe under the contractor yard.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPC102 facing north upstream



Waterbody SUPC102 facing south downstream



Waterbody SUPC102 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Brushy Fork	
Waterbody ID: Supe012		Date: 7/27/2016	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: CG, AS
Photos: 1-3			
Tract Number(s): unknown		Nearest Milepost: NA	Associated Wetland ID(s): Wupe006
Survey Type: <i>(check one)</i> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Other: pipeyard			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 10 ft.		OHWM Indicator: <i>(check all that apply)</i> <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: 2 ft.		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 14 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 5 ft.	Width of Waterbody - Water Edge to Water Edge: 5 ft.	Depth of Water: <i>(Approx.)</i> 1 ft.
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 0.7 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 5 ft. Left: 5 ft.		Bank slope Right: 80 degrees Left: 80 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% 100% _____% _____%			
Width of Riparian Zone: 20 ft.		Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
N/A <input type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> 5 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Willow, princess tree, reed canary grass, jewelweed			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Overhanging veg			
Aquatic Organisms Observed <i>(list)</i> : None but likely present			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Bridged, drainage discharge pipes, adjacent to pasture			
Tributary is: <i>(check one)</i> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

Supe012

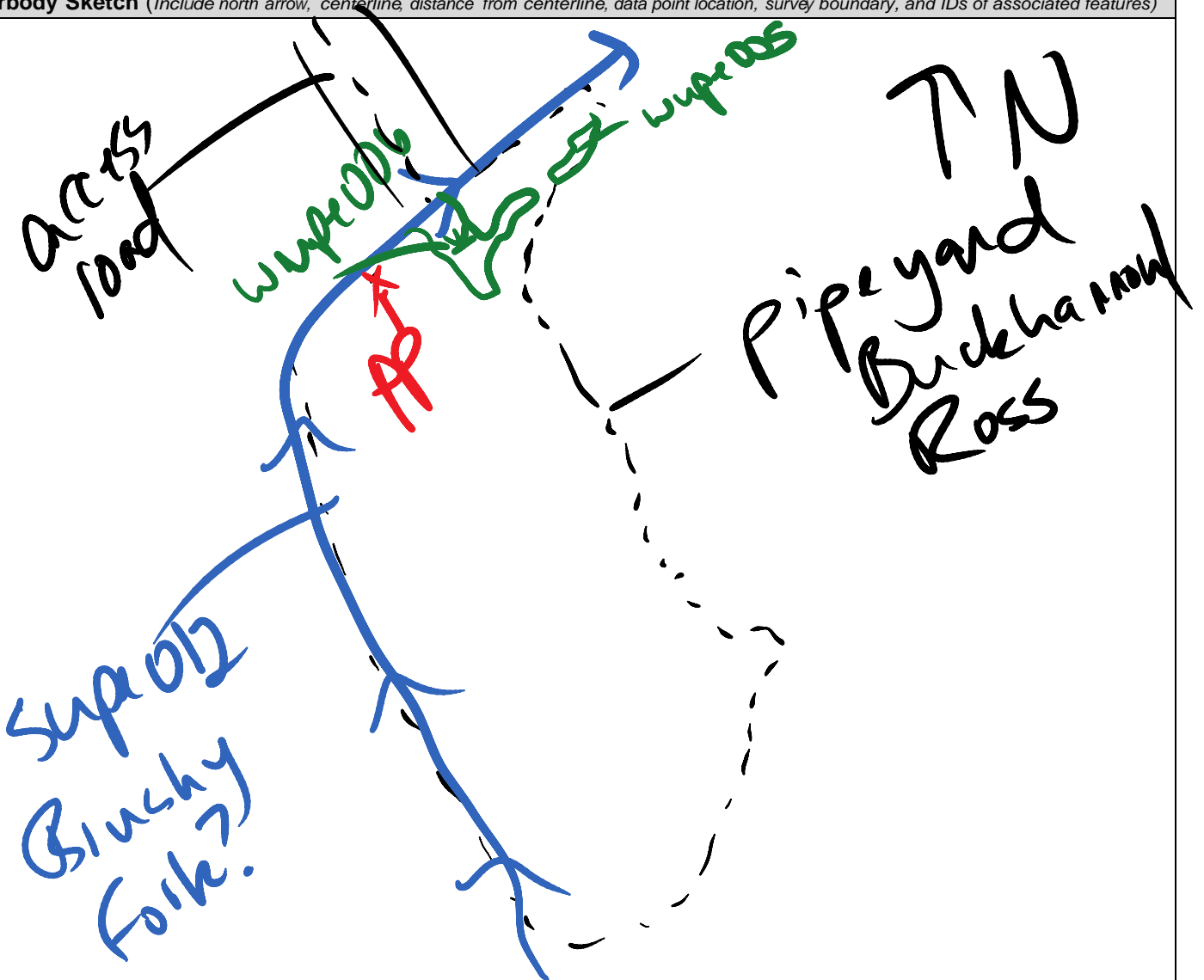
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody supe012 facing southwest upstream



Waterbody supe012 facing northeast downstream



Waterbody supe012 facing northwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Brushy Fork	
Waterbody ID: SUPB004		Date: 6/24/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Tract Number(s): 03-051		Nearest Milepost: 24.6	Associated Wetland ID(s): none
Survey Type: <small>(check one)</small> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <small>(check one)</small> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <small>(check one)</small> <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input checked="" type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 15.0 ft.	OHWM Indicator: <small>(check all that apply)</small>	<input type="checkbox"/> Clear line on bank	<input type="checkbox"/> Shelving
OHWM Height: 1.5 ft.	<input checked="" type="checkbox"/> Bent, matted, or missing vegetation	<input checked="" type="checkbox"/> Wrack line	<input type="checkbox"/> Litter and debris
N/A <input type="checkbox"/>	<input checked="" type="checkbox"/> Wrested vegetation	<input checked="" type="checkbox"/> Scouring	<input type="checkbox"/> Water staining
<input type="checkbox"/> Abrupt plant community change	<input type="checkbox"/> Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: 20.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 15.0 ft.	Width of Waterbody - Water Edge to Water Edge: 15.0 ft.	Depth of Water: <small>(Approx.)</small> 1.0 ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <small>(check one)</small> <input checked="" type="checkbox"/> Straight	Water velocity: <small>(Approx.)</small> 0.1 fps	Bank height Right: 3.0 ft. Left: 3.0 ft.	Bank slope Right: 70 degrees Left: 70 degrees
<input type="checkbox"/> Meandering	N/A <input type="checkbox"/>		
Qualitative Attributes			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small>			
% of Substrate: _____% _____% _____% _____% _____% 100% _____% _____%			
Width of Riparian Zone: _____ ft.	Vegetative Layers: <small>(check all that apply)</small>	<input type="checkbox"/> Trees:	<input type="checkbox"/> Saplings/Shrubs:
N/A <input checked="" type="checkbox"/>	Avg. DBH of Dominants: <small>(approx.)</small>	_____ in.	_____ in.
Dominant Bank Vegetation <small>(list)</small> : Disturbed by clear cut			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools)</small> : Stream resembles a broad shallow coastal canal, rooted aquatic vegetation throughout, silky dogwood, black willow, sedges.			
Aquatic Organisms Observed <small>(list)</small> : Frogs			
T&E Species Observed <small>(list)</small> : none			
Disturbances <small>(ex: livestock access, manure in waterbody, waste discharge pipes)</small> : Ditch/canal			
Tributary is: <small>(check one)</small> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Stream Quality ³ : <small>(check one)</small> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB004

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

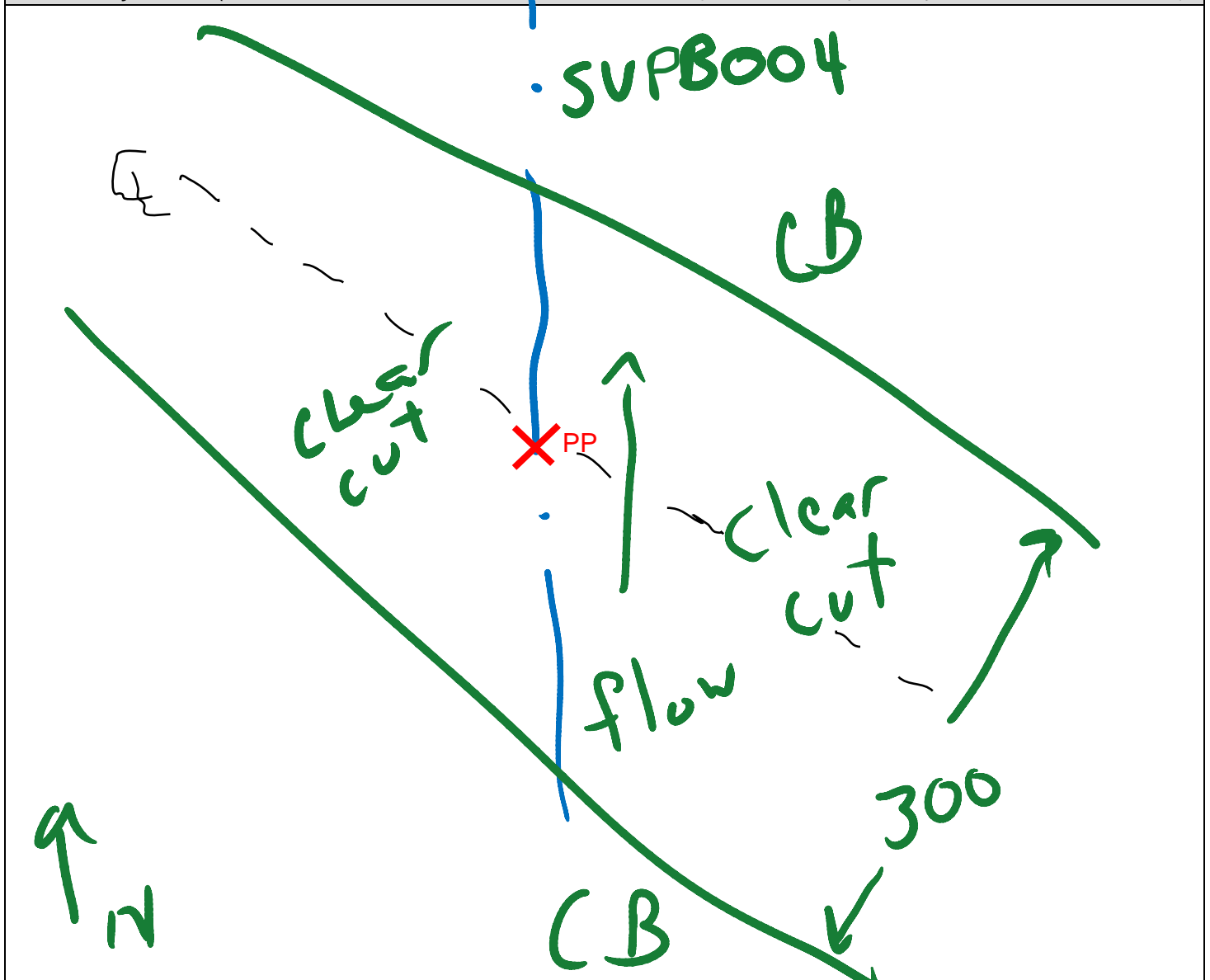
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Channel has been widened and straightened

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB004 facing south upstream



Waterbody SUPB004 facing north downstream



Waterbody SUPB004 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability	Waterbody Name: Unnamed Tributary to Lick Run	Waterbody ID: SUPB005	Date: 6/25/2014
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Tract Number(s): 03-068, 03-066		Nearest Milepost: 26.95	Associated Wetland ID(s): none
Survey Type: <small>(check one)</small> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <small>(check one)</small> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <small>(check one)</small> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>2.0</u> ft.	OHWM Indicator: <small>(check all that apply)</small> <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining		
OHWM Height: <u>0.5</u> ft.	<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change		
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>4.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1.5</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>1.0</u> ft.	Depth of Water: <small>(Approx.)</small> <u>0.1</u> ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <small>(check one)</small> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <small>(Approx.)</small> <u>1</u> fps	Bank height Right: <u>4</u> ft. Left: <u>3</u> ft.	Bank slope Right: <u>80</u> degrees Left: <u>80</u> degrees
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Qualitative Attributes			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% <u>5</u> % _____% _____% <u>95</u> % _____% _____%			
Width of Riparian Zone: _____ ft.	Vegetative Layers: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
N/A <input checked="" type="checkbox"/>	Avg. DBH of Dominants: <small>(approx.)</small> <u>8</u> in. <u>1</u> in. _____ in.		
Dominant Bank Vegetation <small>(list)</small> : Orchardgrass, fescue, red clover, sugar maple , black gum, black cherry, Christmas fern			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools)</small> : Downstream portion of creek is in a pasture, upstream is wooded; very sinuous, debris piles, bars, and benches			
Aquatic Organisms Observed <small>(list)</small> : none			
T&E Species Observed <small>(list)</small> : none			
Disturbances <small>(ex: livestock access, manure in waterbody, waste discharge pipes)</small> : Downstream located in pasture, possibly for grazing.			
Tributary is: <small>(check one)</small> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <small>(check one)</small> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB005

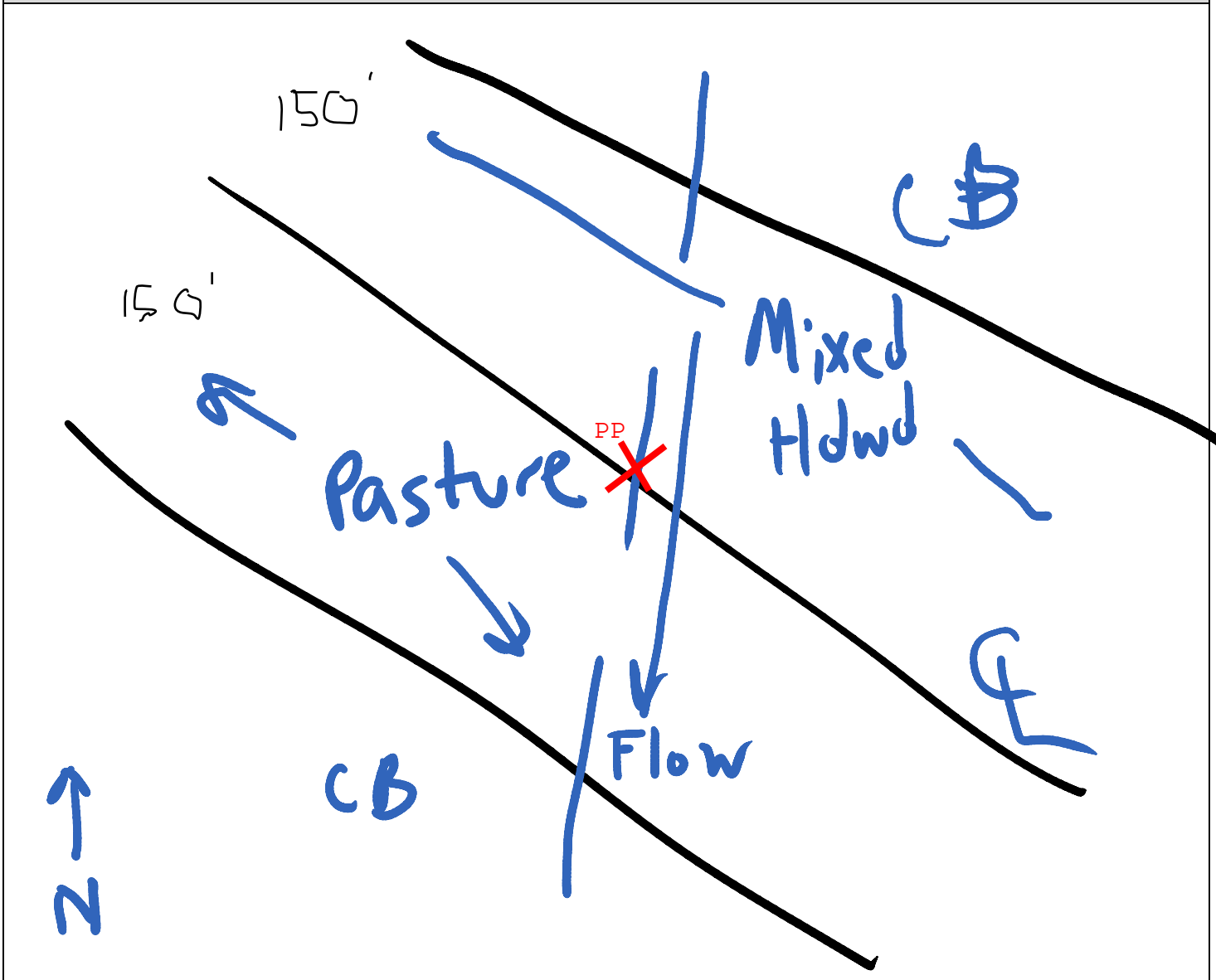
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB005 facing north upstream



Waterbody SUPB005 facing south downstream



Waterbody SUPB005 facing west across

Open Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Pond to Lick Run	
Waterbody ID: OUPA001		Date: 6/25/2014	
State: West Virginia	County: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 1			
Tract Number(s): 03-068		Nearest Milepost: 26.95	Associated Wetland ID(s): none
Survey Type: <small>(check one)</small> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Waterbody Type: <small>(check one)</small> <input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Lake <input type="checkbox"/> Reservoir <input type="checkbox"/> Impoundment <input type="checkbox"/> Oxbow <input type="checkbox"/> Other:			
Hydrologic Regime: <input checked="" type="checkbox"/> Permanently Flooded <input type="checkbox"/> Semipermanently Flooded <input type="checkbox"/> Seasonally Flooded <input type="checkbox"/> Temporarily Flooded			
OHWM Height: <u>3.0</u> ft.		OHWM Indicator: <small>(check all that apply)</small>	
		<input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Depth of Water: <u>2.5</u> ft. N/A <input type="checkbox"/>		Bank height (average): <u>5.0</u> ft.	Bank slope (average): <u>75</u> degrees
Qualitative Attributes			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% <u>20</u> % <u>80</u> % _____% _____%			
Width of Riparian Zone: _____ ft. N/A <input checked="" type="checkbox"/>		Vegetative Layers: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
		Avg. DBH of Dominants: <small>(approx.)</small> <u>11.0</u> in. <u>0.75</u> in. _____ in.	
Dominant Bank Vegetation <small>(list)</small> : Black cherry, sugar maple, black locust, autumn olive, multiflora rose, woodnettle, deertongue			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.)</small> : Pool			
Aquatic Organisms Observed <small>(list)</small> : Frogs			
T&E Species Observed <small>(list)</small> : none			
Disturbances <small>(ex: livestock access, manure in waterbody, waste discharge pipes)</small> : Light livestock use			
Waterbody is: <small>(check one)</small> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Waterbody Quality ^a : <small>(check one)</small> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

OUPA001

^a **High Quality:** Natural, natural bank vegetation around entire waterbody; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

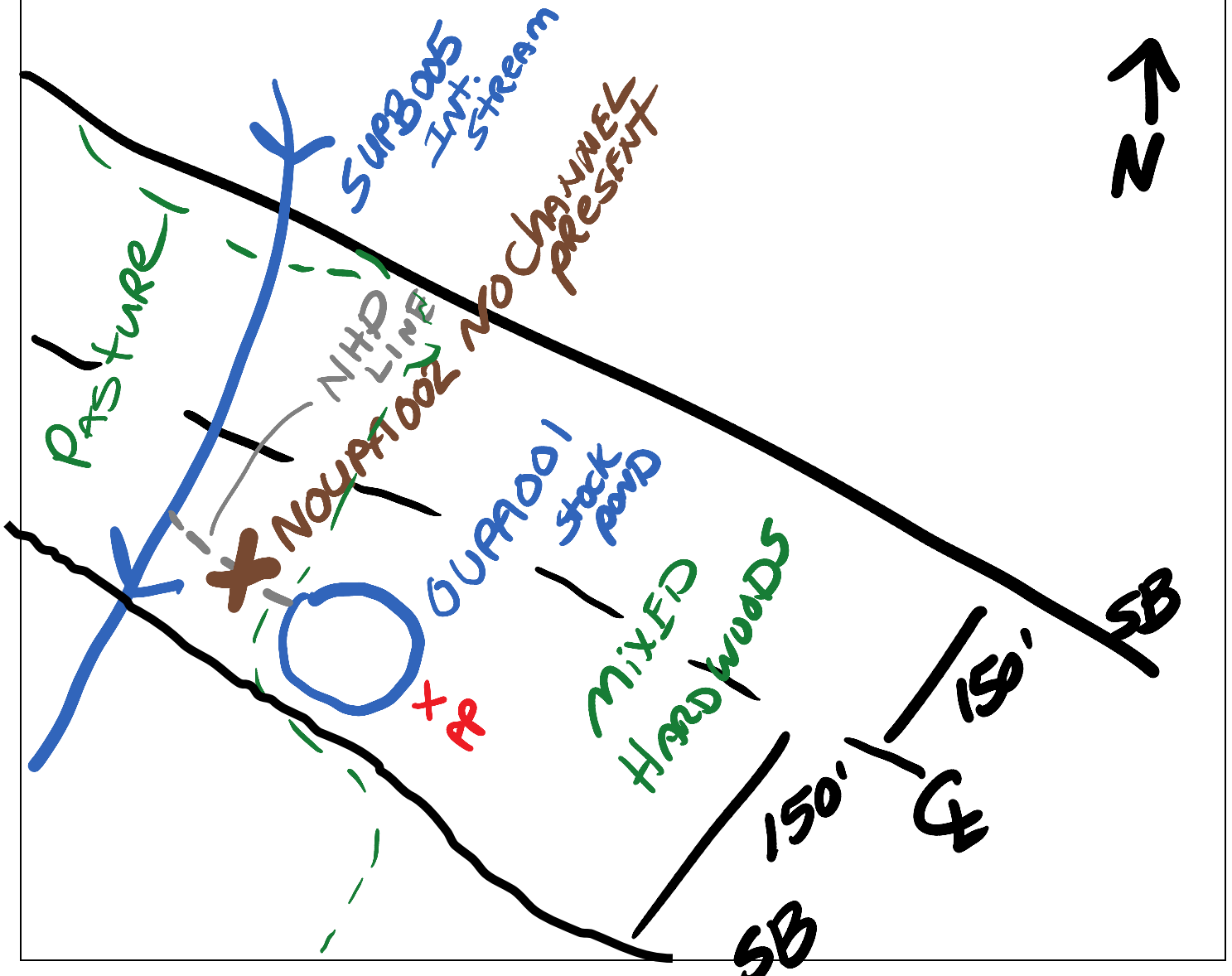
Moderate Quality: Altered by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or bank vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Inflow is sheet flow from draw, dam across mouth of draw, outflow underground to nearby stream

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey boundary, and IDs of associated features)





Waterbody OUPA001 facing northwest

Open Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Pond to Cutright Run	
Waterbody ID: OUPB001		Date: 6/25/2014	
State: West Virginia	County: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 1			
Tract Number(s): 03-076		Nearest Milepost: 27.55	Associated Wetland ID(s): none
Survey Type: <small>(check one)</small> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Waterbody Type: <small>(check one)</small> <input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Lake <input type="checkbox"/> Reservoir <input type="checkbox"/> Impoundment <input type="checkbox"/> Oxbow <input type="checkbox"/> Other:			
Hydrologic Regime: <input checked="" type="checkbox"/> Permanently Flooded <input type="checkbox"/> Semipermanently Flooded <input type="checkbox"/> Seasonally Flooded <input type="checkbox"/> Temporarily Flooded			
OHWM Height: <u> 4 </u> ft.		OHWM Indicator: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Depth of Water: <u> 3 </u> ft. N/A <input type="checkbox"/>	Bank height (average): <u> 5 </u> ft.		Bank slope (average): <u> 40 </u> degrees
Qualitative Attributes			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% <u> 100 </u> % _____% _____%			
Width of Riparian Zone: <u> </u> ft. N/A <input checked="" type="checkbox"/>		Vegetative Layers: <small>(check all that apply)</small> <input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs Avg. DBH of Dominants: <small>(approx.)</small> _____ in. <u> 1 </u> in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Juncus sp., multiflora rose, cattail, autumn olive			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.)</small> : Some aquatic vegetation on pond edge			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances <small>(ex: livestock access, manure in waterbody, waste discharge pipes)</small> : Farm pond in cattle field, but fenced off from livestock			
Waterbody is: <small>(check one)</small> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Waterbody Quality ^a : <small>(check one)</small> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

OUPB001

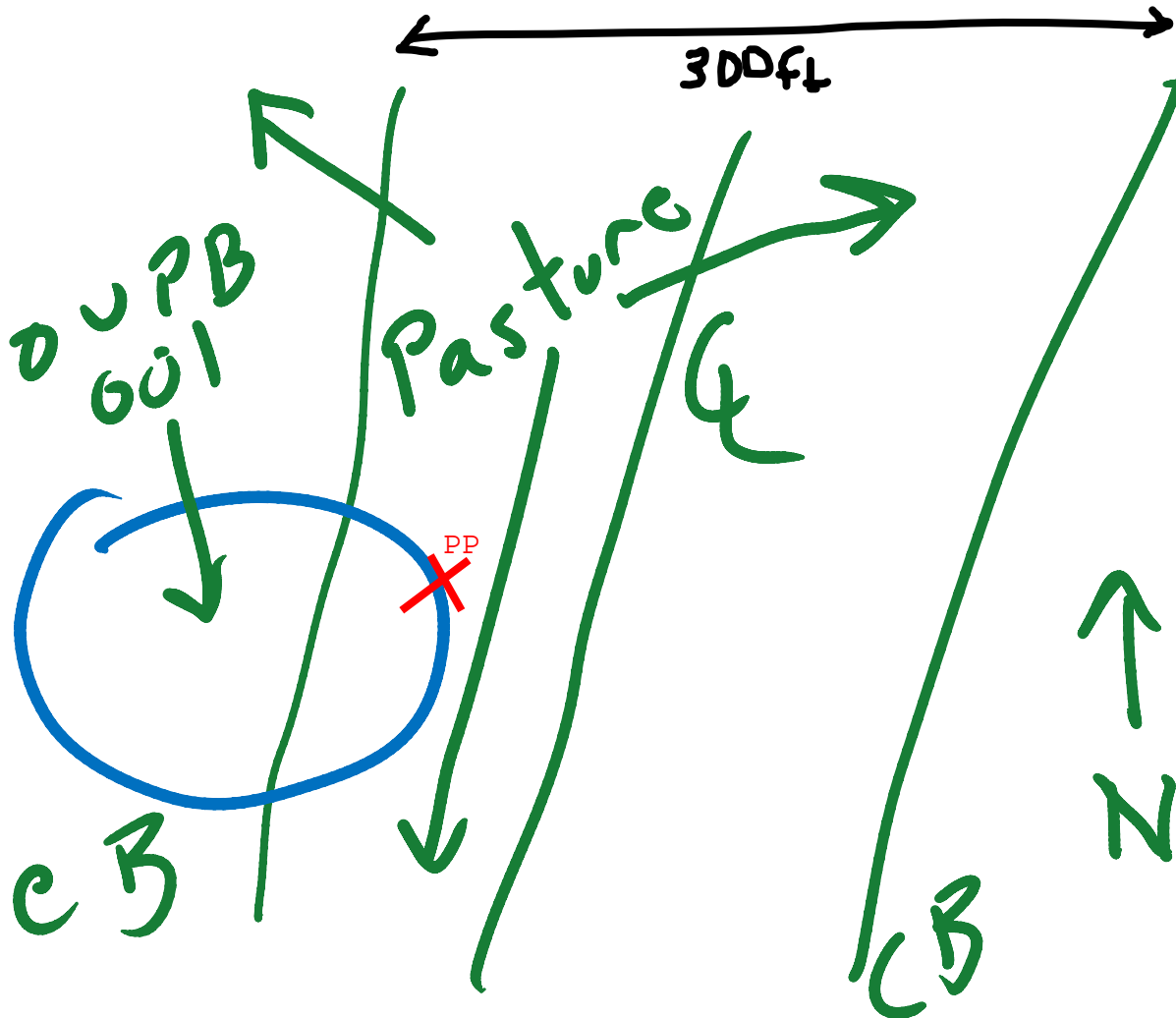
^a **High Quality:** Natural, natural bank vegetation around entire waterbody; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or bank vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey boundary, and IDs of associated features)





Waterbody OUPB001 facing northwest

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Cutright Run	
Waterbody ID: SUPB006		Date: 6/26/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 3			
Tract Number(s): 03-076		Nearest Milepost: 27.65	Associated Wetland ID(s): WUPB006 in floodplain, not connected
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>12.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: <u>2.5</u> ft.		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>16</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>9</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>10</u> ft.	Depth of Water: <i>(Approx.)</i> <u>1.5</u> ft.
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> <u>1.0</u> fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: <u>10</u> ft. Left: <u>10</u> ft.		Bank slope Right: <u>85</u> degrees Left: <u>85</u> degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% <u>100</u> % _____% _____%			
Width of Riparian Zone: _____ ft.		Vegetative Layers: <i>(check all that apply)</i> <input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input type="checkbox"/> Herbs	
N/A <input checked="" type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> _____ in. <u>1.5</u> in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Silky dogwood, elderberry, alder, wingstem,			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Overhanging trees, roots, debris piles, bars and benches			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Pasture on both sides, stream appears to have been straightened , channelized as a result og agriculture			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB006

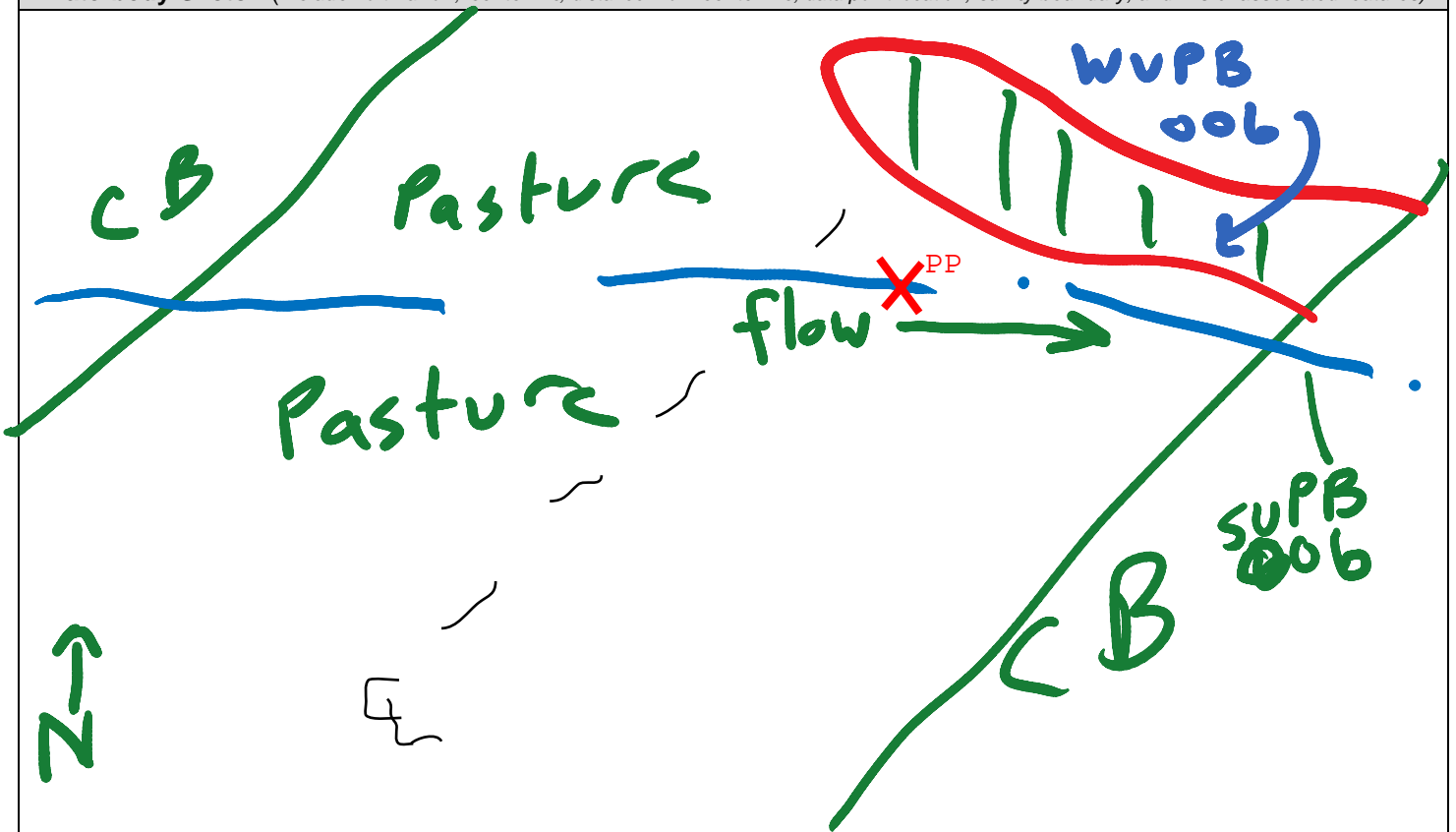
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB006 facing west upstream



Waterbody SUPB006 facing east downstream



Waterbody SUPB006 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Cutright Run	
Waterbody ID: supa050		Date: 5/14/2015	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: GB, SA
Photos: 3 photos			
Tract Number(s): 03-076; access road 258		Nearest Milepost: 28.4	Associated Wetland ID(s): wupb007
Survey Type: <small>(check one)</small>			
<input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <small>(check one)</small>			
<input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <small>(check one)</small>			
<input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <small>(check all that apply)</small>	
Height: 0.5 ft.		<input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 5.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2.0 ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> 1.25 ft.	Depth of Water: <small>(Approx.)</small> N/A <input type="checkbox"/> 0.08 ft.
Sinuosity: <small>(check one)</small>	Water velocity: <small>(Approx.)</small>	Bank height	Bank slope
<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	0.10 fps N/A <input type="checkbox"/>	Right: 3.0 ft. Left: 3.0 ft.	Right: 70 degrees Left: 80 degrees
Qualitative Attributes			
Water Appearance: <small>(check one)</small>			
<input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small>			
<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input checked="" type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% 25% 25% 15% 25% _____% 10%			
Width of Riparian Zone: _____ ft.	Vegetative Layers: <small>(check all that apply)</small>		
N/A <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <small>(approx.)</small>			
_____ in. _____ in.			
Dominant Bank Vegetation <small>(list)</small> :			
Black cherry, sugar maple, black locust, multiflora rose, Morrow's honeysuckle, autumn olive, Virginia creeper, poison ivy, orchard grass, angelica, golden ragwort, clover, milkweed			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools)</small> :			
Leaf packs			
Aquatic Organisms Observed <small>(list)</small> :			
none			
T&E Species Observed <small>(list)</small> :			
none			
Disturbances <small>(ex: livestock access, manure in waterbody, waste discharge pipes)</small> :			
Parallels farm road, livestock access, appears to have been ditched in the past, culvert crossing for Sago Road			
Tributary is: <small>(check one)</small>			
<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ^a : <small>(check one)</small>			
<input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

supa050

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

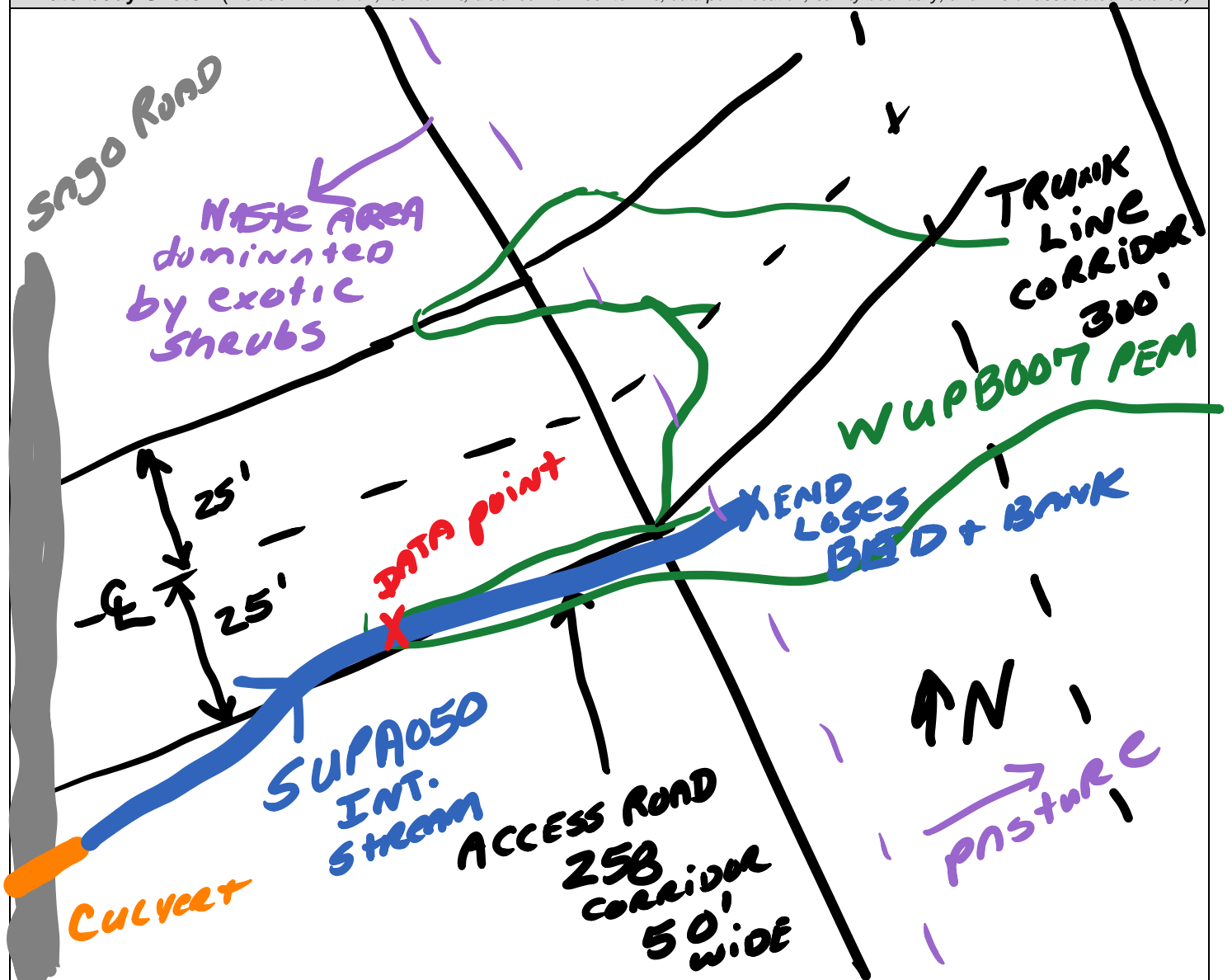
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Upstream continues out of access road corridor, downstream ends within wetland wupb007 within access road corridor

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA050 facing west upstream



Waterbody SUPA050 facing east downstream



Waterbody SUPA050 facing south across

Open Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Unnamed pond	
Waterbody ID: Oupe001		Date: 6/7/2016	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: CG, SA
Photos: 1-2			
Tract Number(s): unknown		Nearest Milepost: 29.8	Associated Wetland ID(s): none
Survey Type: <small>(check one)</small> <input type="checkbox"/> Centerline <input checked="" type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Waterbody Type: <small>(check one)</small> <input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Lake <input type="checkbox"/> Reservoir <input type="checkbox"/> Impoundment <input type="checkbox"/> Oxbow <input type="checkbox"/> Other:			
Hydrologic Regime: <input checked="" type="checkbox"/> Permanently Flooded <input type="checkbox"/> Semipermanently Flooded <input type="checkbox"/> Seasonally Flooded <input type="checkbox"/> Temporarily Flooded			
OHWM Height: <u> 1 </u> ft.		OHWM Indicator: <small>(check all that apply)</small>	
		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change	
Depth of Water: <u> 3 </u> ft. N/A <input type="checkbox"/>		Bank height (average): <u> 4 </u> ft.	Bank slope (average): <u> 60 </u> degrees
Qualitative Attributes			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____ % _____ % <u> 5 </u> % <u> 15 </u> % <u> 40 </u> % <u> 40 </u> % _____ % _____ %			
Width of Riparian Zone: <u> </u> ft. N/A <input checked="" type="checkbox"/>		Vegetative Layers: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
		Avg. DBH of Dominants: <small>(approx.)</small> <u> 5 </u> in. <u> 1 </u> in.	
Dominant Bank Vegetation <i>(list)</i> : Rushes, tulip tree, oak, birch			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Overhanging veg			
Aquatic Organisms Observed <i>(list)</i> : fish			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Drainage pipes			
Waterbody is: <small>(check one)</small> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Waterbody Quality ^a : <small>(check one)</small> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

Oupe001

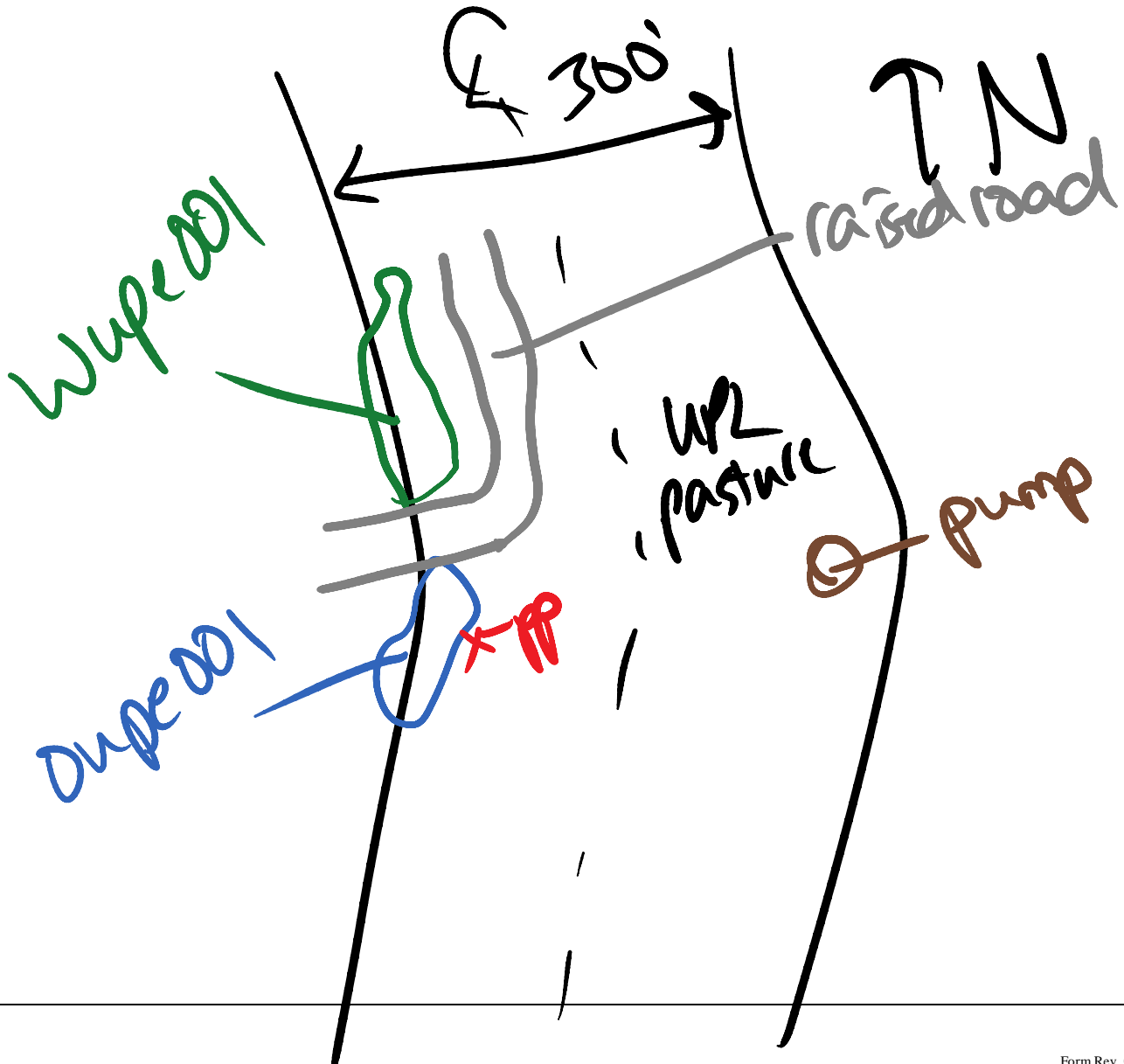
^a **High Quality:** Natural, natural bank vegetation around entire waterbody; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or bank vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey boundary, and IDs of associated features)





Open waterbody OUPE001 facing south



Open waterbody OUPE001 facing southwest

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to French Creek	
Waterbody ID: SUPB007		Date: 6/26/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: TP
Photos: 3			
Tract Number(s): 03-080		Nearest Milepost: 28.3	Associated Wetland ID(s): WUPB008
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 5.0 ft.		OHWM Indicator: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
OHWM Height: 0.5 ft.		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 7 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 4 ft.	Width of Waterbody - Water Edge to Water Edge: 1.5 ft.	Depth of Water: <i>(Approx.)</i> 0.25 ft.
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1.0 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 3 ft. Left: 3 ft.		Bank slope Right: 85 degrees Left: 85 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% 100% _____% _____%			
Width of Riparian Zone: _____ ft.		Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input type="checkbox"/> Herbs	
N/A <input checked="" type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> 10 in. 1.5 in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Sugar maple, American beech, white oak, spice bush, Christmas fern			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Overhanging trees, debris piles, bars and benches, very sinuous, one long run, few pools			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Recently timbered, lots of dead snags left in creek bed, logging road has dammed upstream portion of creek			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB007

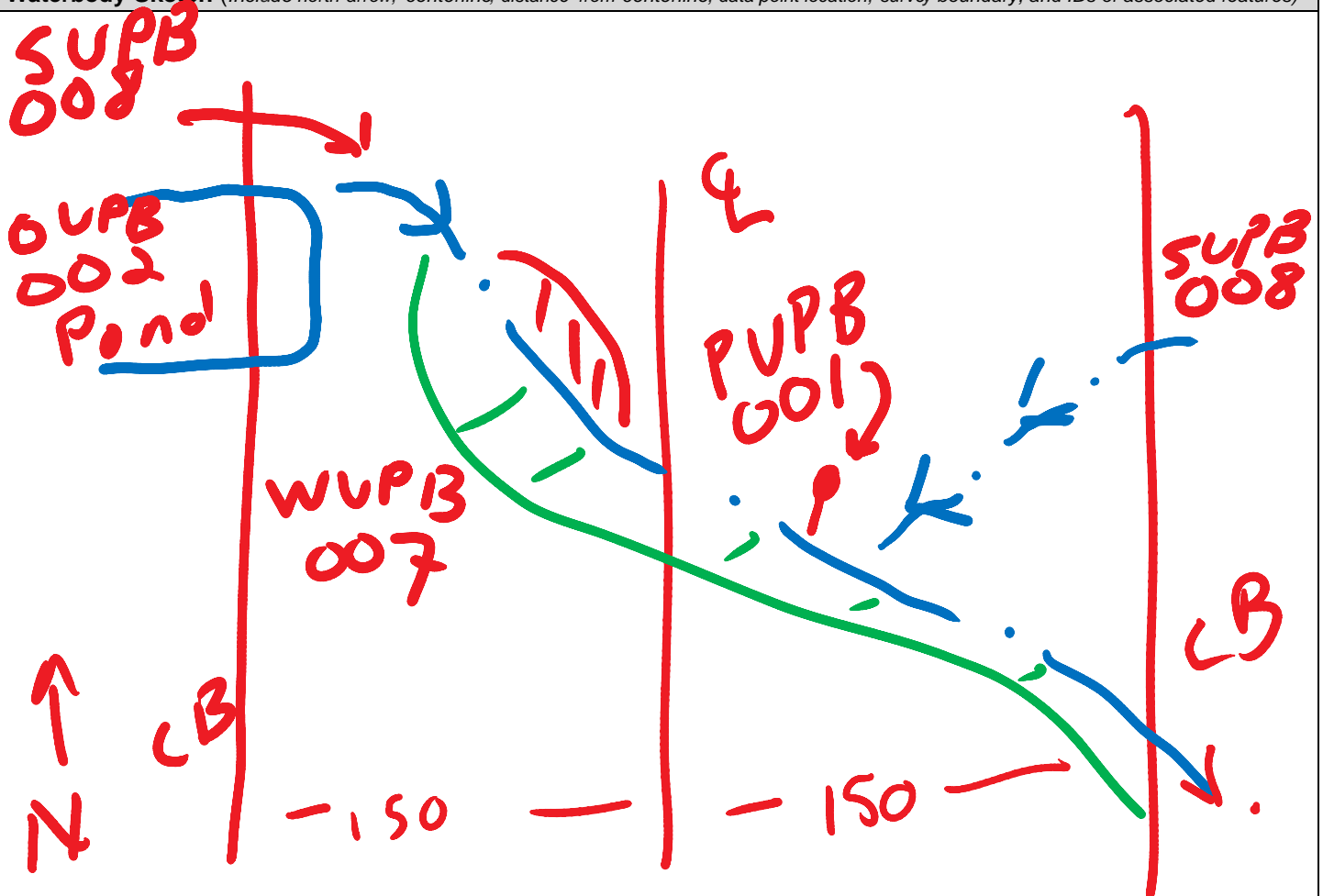
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB007 facing north upstream



Waterbody SUPB007 facing south downstream



Waterbody SUPB007 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to French Creek	
Waterbody ID: SUPA006		Date: 6/26/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-084		Nearest Milepost: 29.0	Associated Wetland ID(s): WUPA007
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.75 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 5.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2.5 ft.	Width of Waterbody - Water Edge to Water Edge: 2.5 ft.	Depth of Water: <i>(Approx.)</i> 0.50 ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1.5 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 2.5 ft. Left: 3.0 ft.		Bank slope Right: 70 degrees Left: 90 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% 10% 10% 40% 40% ___% ___%			
Width of Riparian Zone: 30 ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input type="checkbox"/>		<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
N/A <input type="checkbox"/>		Avg. DBH of Dominants: <i>(approx.)</i> 12.0 in. 1.0 in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Sugar maple, ironwood, birch, white oak, willow, raspberry, deertongue, jewelweed, hop sedge, multiflora rose			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Small pools, riffles, pockets of emergent vegetation			
Aquatic Organisms Observed <i>(list)</i> : Frogs, minnows			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Along road 20/9 CR; culvert crossing for dirt two track, dam upstream out of corridor			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPA006

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

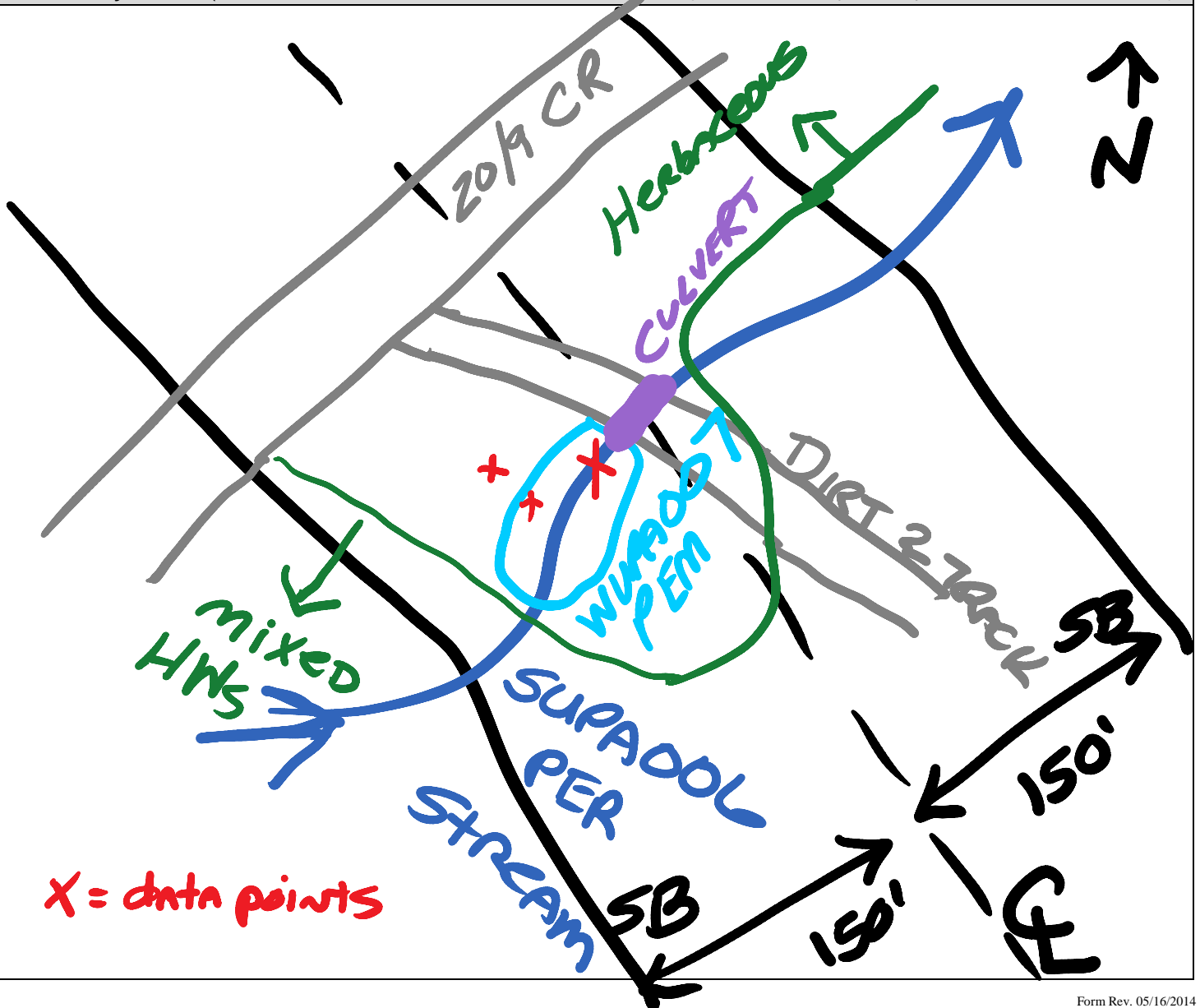
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to French Creek, continues out of corridor in both directions; flows through WUPA007

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA006 facing southwest upstream



Waterbody SUPA006 facing northeast downstream



Waterbody SUPA006 facing northwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to French Creek	
Waterbody ID: SUPB052		Date: 9/2/2015	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: TP, GB
Photos: 01-03			
Tract Number(s): 03-090-AR1		Nearest Milepost: 31.1	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 5.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 1.0 ft.		<input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 15.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 3.0 ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input checked="" type="checkbox"/> _____ ft.	Depth of Water: <i>(Approx.)</i> N/A <input checked="" type="checkbox"/> _____ ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _____ fps N/A <input checked="" type="checkbox"/>	Bank height Right: 5.0 ft. Left: 7.0 ft.	Bank slope Right: 30 degrees Left: 70 degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input checked="" type="checkbox"/> No water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% 5% 20% 50% 15% 10% _____% _____%			
Width of Riparian Zone: 10 ft.	Vegetative Layers: <i>(check all that apply)</i>		
N/A <input type="checkbox"/>	<input type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> _____ in. 2 in.			
Dominant Bank Vegetation <i>(list)</i> : Fescue (upstream of culvert), tag alder, silky dogwood, jewelweed, wing stem, and multiflora rose			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Cobble, woody debris, a few pools			
Aquatic Organisms Observed <i>(list)</i> : Mayfly and stonefly larvae			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Road culvert, blown out on downstream end of culvert, fescue/yard upstream of culvert			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPB052

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

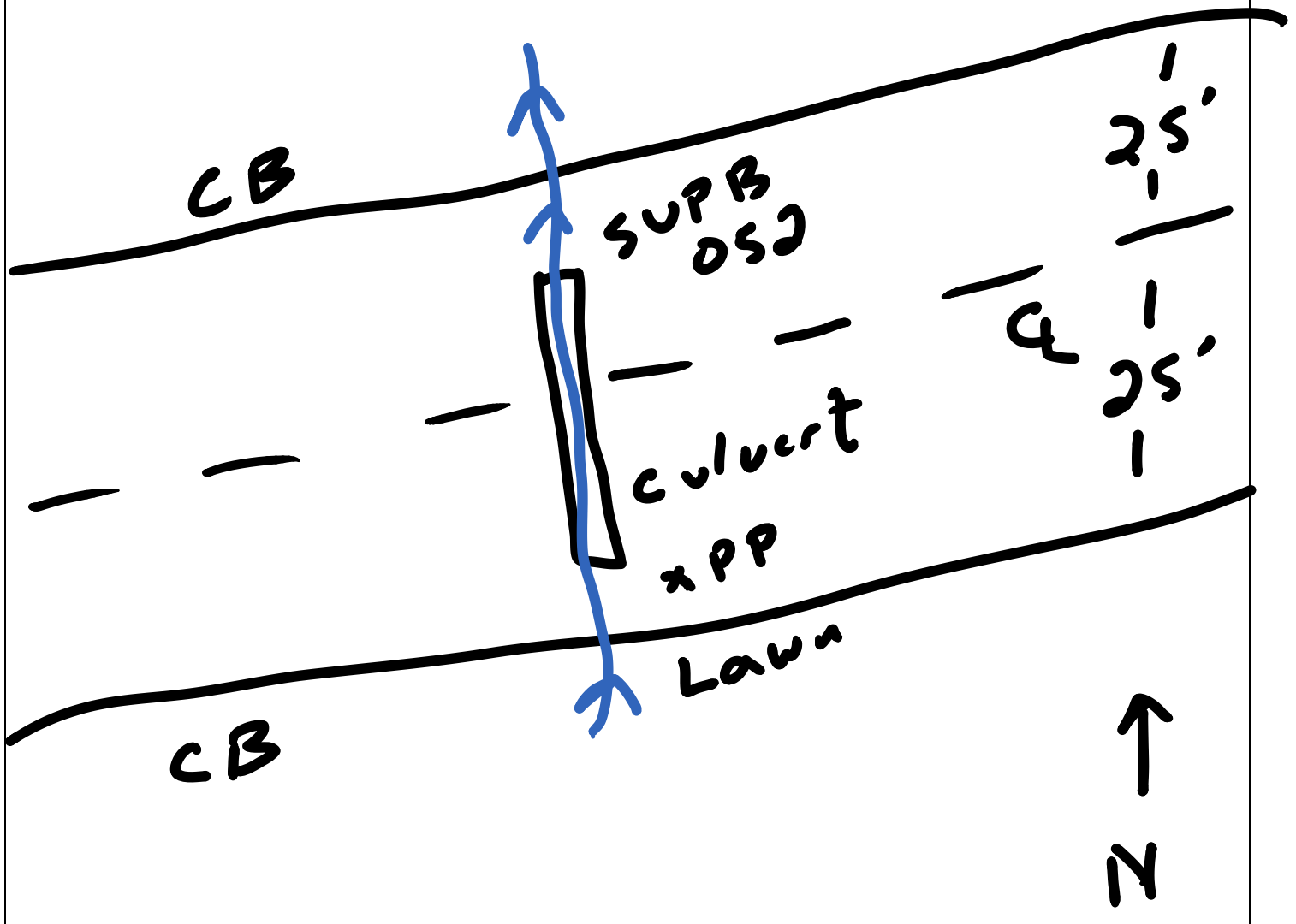
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Intermittent stream, weak riffle pool sequence, moderate grade control, moderate bars and benches, and a few pools with standing water. Deeply incised downstream of road culvert. Noted raccoon tracks. Recorded as SUPA006 in trunkline.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB052 facing south upstream



Waterbody SUPB052 facing north downstream



Waterbody SUPB052 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to French Creek	
Waterbody ID: SUPB053		Date: 9/2/2015	
State: West Virginia	County: Upshur	Company: NRG	Crew Member Initials: TP, GB
Photos: 01-03			
Tract Number(s): 03-090-AR1		Nearest Milepost: 31.1	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.75 ft.		<input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 5.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2.0 ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input checked="" type="checkbox"/> _____ ft.	Depth of Water: <i>(Approx.)</i> N/A <input checked="" type="checkbox"/> _____ ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _____ fps N/A <input checked="" type="checkbox"/>	Bank height Right: 4.0 ft. Left: 4.0 ft.	Bank slope Right: 85 degrees Left: 85 degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input checked="" type="checkbox"/> No water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% _____% 30% 30% 15% 25% _____% _____%			
Width of Riparian Zone: 10 ft.	Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
N/A <input type="checkbox"/>	Avg. DBH of Dominants: <i>(approx.)</i> 10 in. 2 in.		
Dominant Bank Vegetation <i>(list)</i> : (Powerline ROW upstream of culvert) Sycamore, ironwood, wing stem, deer-tongue			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Cobble			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Road culvert, maintained power line ROW upstream of culvert			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

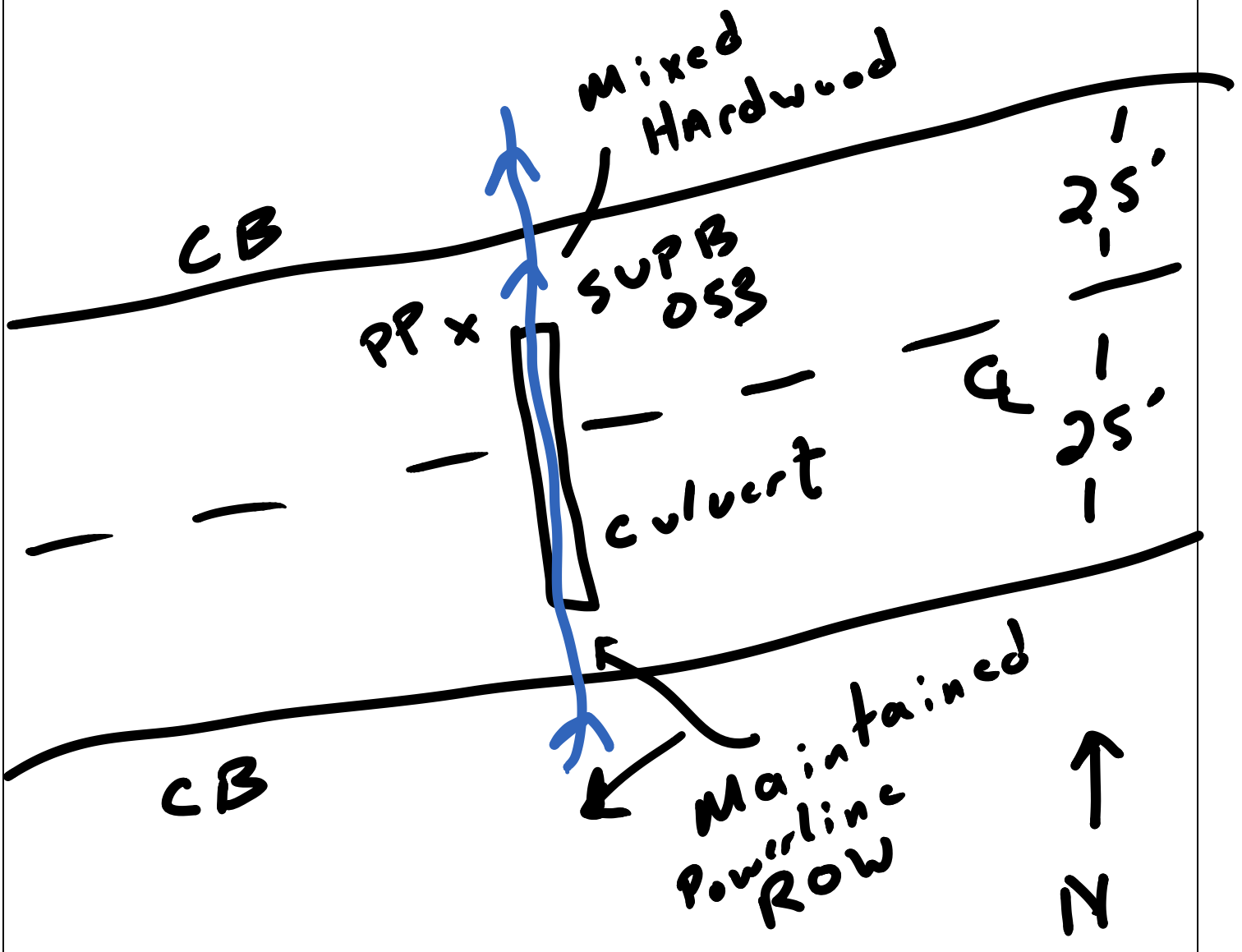
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Intermittent stream, weak sinuosity, weak grade control.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPB053 facing southwest upstream



Waterbody SUPB053 facing northeast downstream



Waterbody SUPB053 facing southeast across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Unnamed Tributary to French Creek	
Waterbody ID: SUPA007		Date: 6/26/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-089		Nearest Milepost: 29.3	Associated Wetland ID(s): WUPA008
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 3.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.50 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 5.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1.5 ft.	Width of Waterbody - Water Edge to Water Edge: 1.5 ft.	Depth of Water: <i>(Approx.)</i> 0.25 ft.
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> 0.5 fps	Bank height Right: 1.5 ft. Left: 1.5 ft.	Bank slope Right: 75 degrees Left: 45 degrees
N/A <input type="checkbox"/>	N/A <input type="checkbox"/>		
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% 30% 70% _____% _____%			
Width of Riparian Zone: WUPA008 ft.	Vegetative Layers: <i>(check all that apply)</i>		
N/A <input type="checkbox"/>	<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
	Avg. DBH of Dominants: <i>(approx.)</i> 12 in. 1.0 in. _____ in.		
Dominant Bank Vegetation <i>(list)</i> : White oak, yellow poplar, black gum, multiflora rose, Japanese spirea, deertongue, cinnamon fern			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Pockets of emergent vegetation			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Logged area			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPA007

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

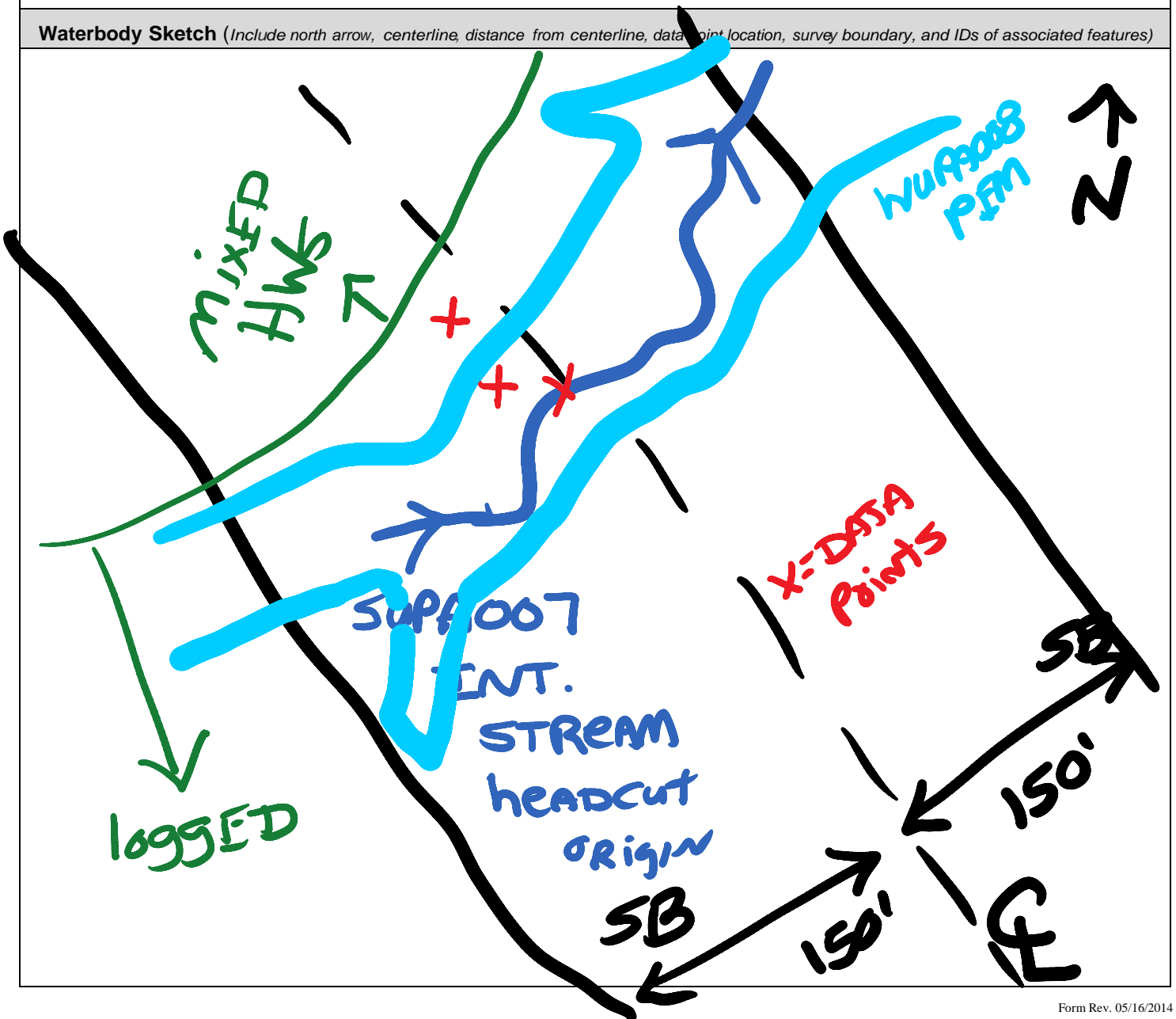
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to French Creek, originates at a seep and headcut within corridor, downstream continues out flows through wetland WUPA008

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA007 facing southwest upstream



Waterbody SUPA007 facing northeast downstream



Waterbody SUPA007 facing northwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: French Creek	
Waterbody ID: SUPA008		Date: 6/26/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-090		Nearest Milepost: 29.5	Associated Wetland ID(s): WUPA009
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 40.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 2.5 ft.		<input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input checked="" type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 55.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 35.0 ft.	Width of Waterbody - Water Edge to Water Edge: 35.0 ft.	Depth of Water: <i>(Approx.)</i> 1.5 ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 0.5 fps	Bank height: Right: 20.0 ft. Left: 6.0 ft.
N/A <input type="checkbox"/>		Bank slope: Right: 70 degrees Left: 70 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% _____% _____% _____% <u>40</u> % <u>60</u> % ___% ___%			
Width of Riparian Zone: 40 ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input type="checkbox"/>		<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
		Avg. DBH of Dominants: <i>(approx.)</i> <u>14</u> in. <u>1.0</u> in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Sycamore, northern red oak, sugar maple, beech, ironwood, wingstem, poison ivy, Japanese stiltgrass, jewelweed			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Woody debris piles, overhanging roots, riffles, runs			
Aquatic Organisms Observed <i>(list)</i> : Frog, fish			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Railroad tracks on east side			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

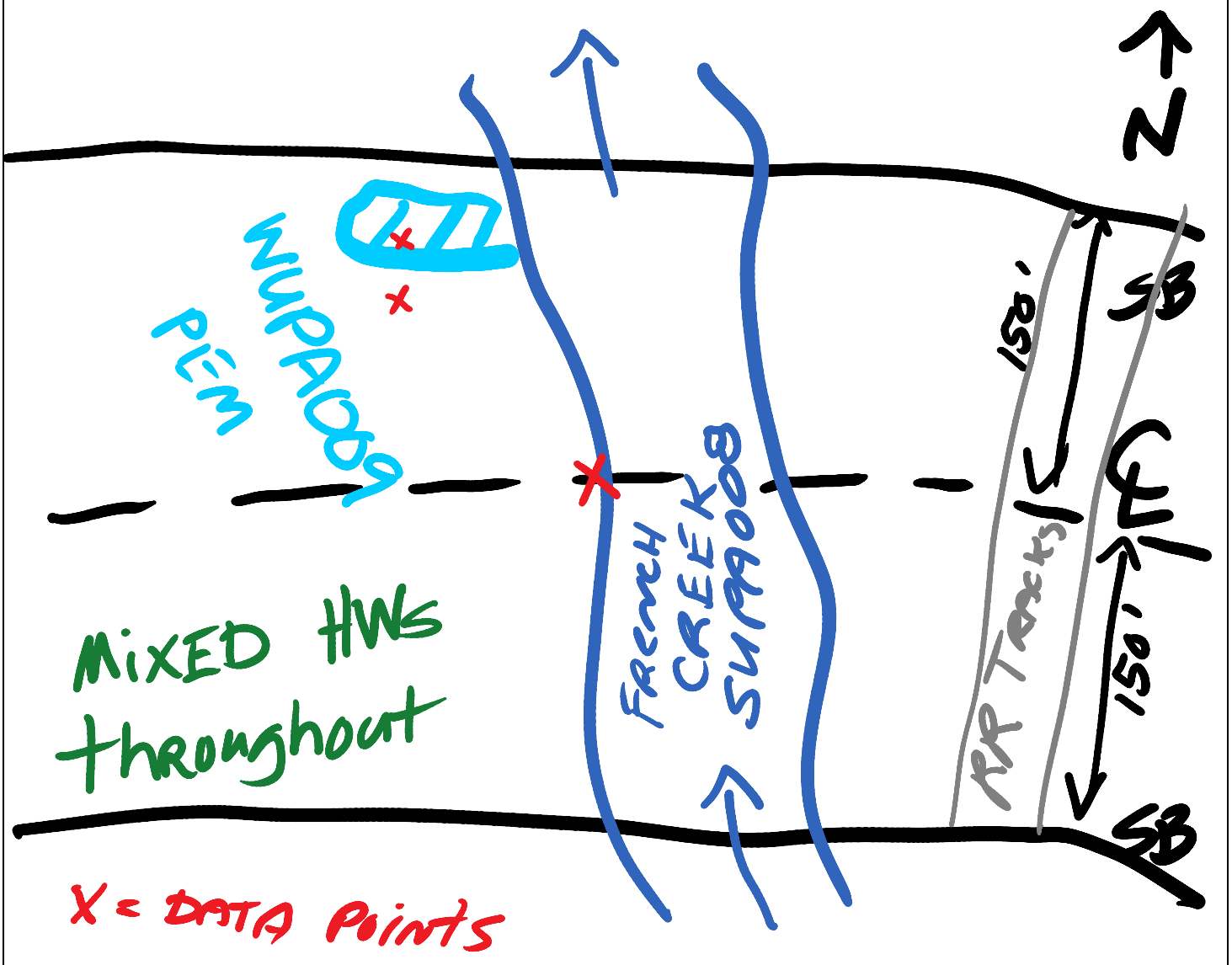
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

French Creek, continues out of corridor both directions, upline and downline taken, wetland WUPA009 is connected

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA008 facing south upstream



Waterbody SUPA008 facing north downstream



Waterbody SUPA008 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeast Reliability		Waterbody Name: Buckhannon River	
Waterbody ID: SUPA009		Date: 6/27/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-097		Nearest Milepost: 30.0	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input checked="" type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>75.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: <u>3.5</u> ft.		<input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input checked="" type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>95.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>60.0</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>65.0</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>2.0</u> ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>2.0</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>12.0</u> ft. Left: <u>10.0</u> ft.	Bank slope Right: <u>75</u> degrees Left: <u>60</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% <u>15</u> % <u>15</u> % <u>5</u> % <u>25</u> % <u>40</u> % _____% _____%			
Width of Riparian Zone: <u>250</u> ft.	Vegetative Layers: <i>(check all that apply)</i>		
N/A <input type="checkbox"/>	<input checked="" type="checkbox"/> Trees: <u>14.0</u> in. <input checked="" type="checkbox"/> Saplings/Shrubs: <u>1.0</u> in. <input checked="" type="checkbox"/> Herbs: _____ in.		
Dominant Bank Vegetation <i>(list)</i> : Sycamore, sugar maple, tulip poplar, rhododendron, Japanese spirea, dogwood, Japanese knotweed, wingstem, stiltgrass, jewelweed			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Woody debris piles, overhanging roots, pools, riffles, runs, boulders in channel, small vegetated bars			
Aquatic Organisms Observed <i>(list)</i> : Frog, fish			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Railroad tracks and road on west side, road on east side			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input checked="" type="checkbox"/> High <input type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

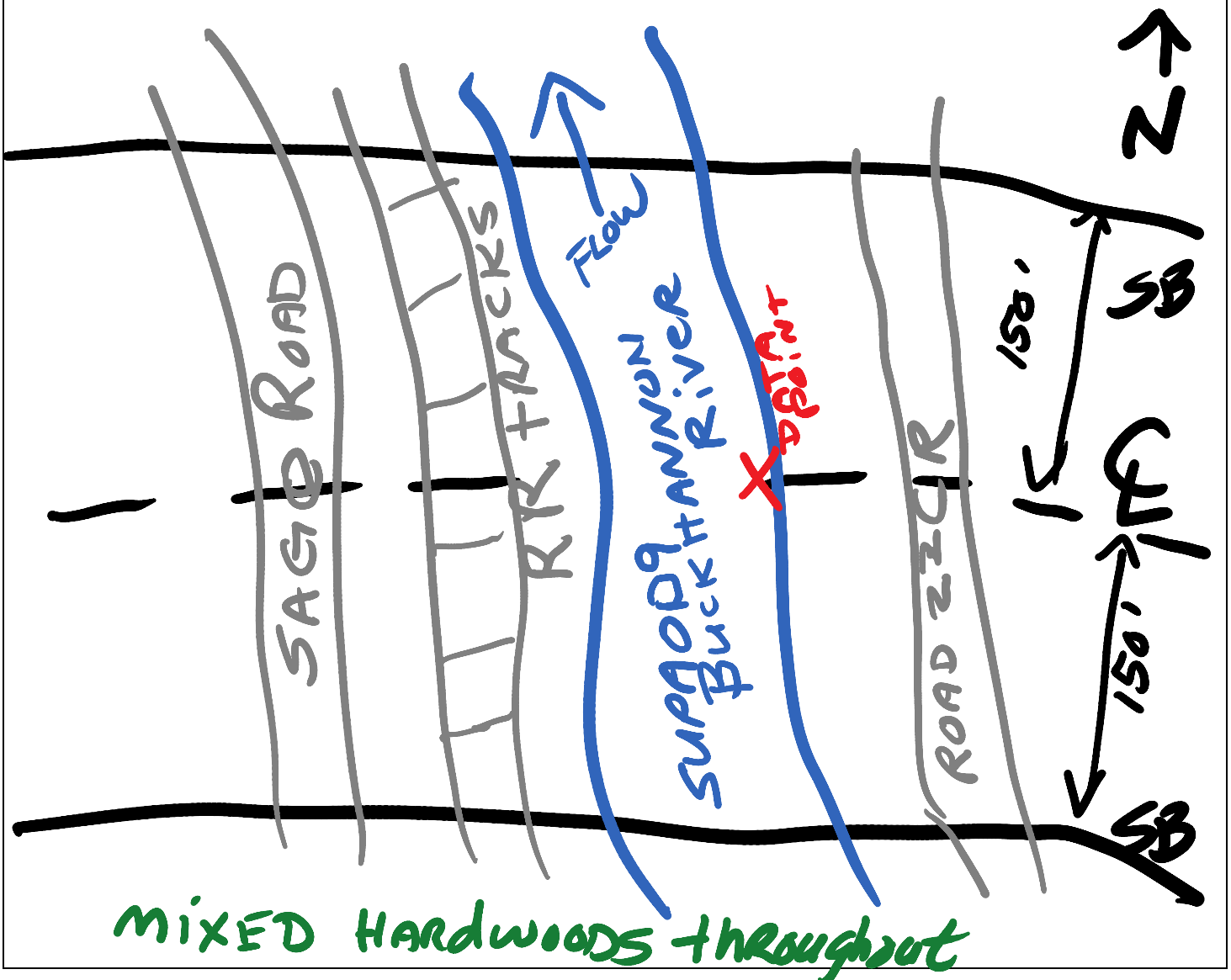
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Buckhannon River, continues out of corridor both directions, upline and downline taken

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA009 facing south upstream



Waterbody SUPA009 facing north downstream



Waterbody SUPA009 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeastern Reliability		Waterbody Name: Unnamed Tributary to Buckhannon Run	
Waterbody ID: SUPA010		Date: 6/27/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-098, 03-099		Nearest Milepost: 31.2	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input checked="" type="checkbox"/> Other: Linear seep			
OHWM Width: <u>1.0</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: <u>0.10</u> ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>3.0</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>0.75</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>0.5</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.10</u> ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>0.25</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>1.0</u> ft. Left: <u>1.0</u> ft.	Bank slope Right: <u>35</u> degrees Left: <u>35</u> degrees
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: <u>10</u> % ___ % <u>20</u> % ___ % <u>30</u> % <u>20</u> % <u>20</u> % ___ %			
Width of Riparian Zone: ___ ft. N/A <input checked="" type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> <u>14.0</u> in. <u>1.0</u> in. _____ in.			
Dominant Bank Vegetation <i>(list)</i> : Sugar maple, chestnut oak, black gum, greenbrier, beech, rhododendron, stiltgrass			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Leaf packs			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): none			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

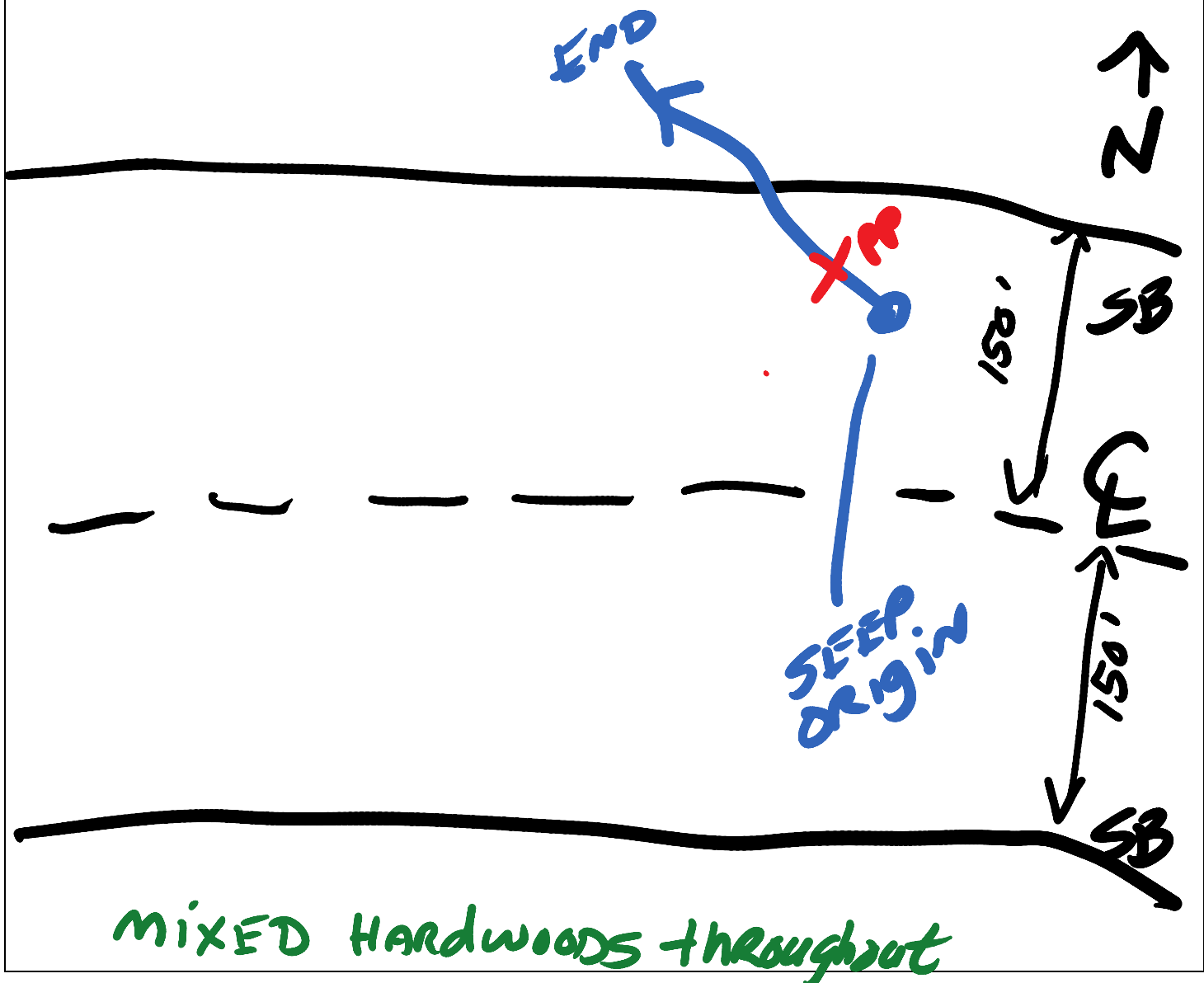
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Linear seep feature with week stream parameters but decent flow, begins in corridor at a seep on steep sideslope, feature ends just outside corridor.

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA0010 facing east upstream



Waterbody SUPA010 facing west downstream



Waterbody SUPA010 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Southeastern Reliability		Waterbody Name: Unnamed Tributary to Trubie Run	
Waterbody ID: SUPA011		Date: 6/27/2014	
State: West Virginia	County/Parish: Upshur	Company: Natural Resource Group	Crew Member Initials: GB, LE
Photos: 3			
Tract Number(s): 03-100		Nearest Milepost: 31.4	Associated Wetland ID(s): none
Survey Type: <i>(check one)</i> <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Other:			
Physical Attributes			
Stream Classification: <i>(check one)</i> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <i>(check one)</i> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 4.0 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.50 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: 6.0 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 3.0 ft.	Width of Waterbody - Water Edge to Water Edge: 2.5 ft.	Depth of Water: <i>(Approx.)</i> 0.25 ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 0.25 fps	Bank height: Right: 3.5 ft. Left: 2.5 ft.
N/A <input type="checkbox"/>		Bank slope: Right: 50 degrees Left: 70 degrees	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input type="checkbox"/> No water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Surface scum <input type="checkbox"/> Algal mats <input type="checkbox"/> Other:			
Substrate: <i>(check all that apply)</i>			
% of Substrate: _____% _____% <u>40</u> % <u>5</u> % <u>15</u> % <u>30</u> % <u>10</u> % _____%			
Width of Riparian Zone: _____ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> Trees: <input checked="" type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs	
		Avg. DBH of Dominants: <i>(approx.)</i> <u>12.0</u> in. <u>1.25</u> in. _____ in.	
Dominant Bank Vegetation <i>(list)</i> : Sugar maple, chestnut oak, tulip poplar, greenbrier, ironwood, multiflora rose, beech, ladyfern, stiltgrass			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Leaf packs			
Aquatic Organisms Observed <i>(list)</i> : none			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Refuse dumping			
Tributary is: <i>(check one)</i> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
Stream Quality ² : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SUPA011

^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

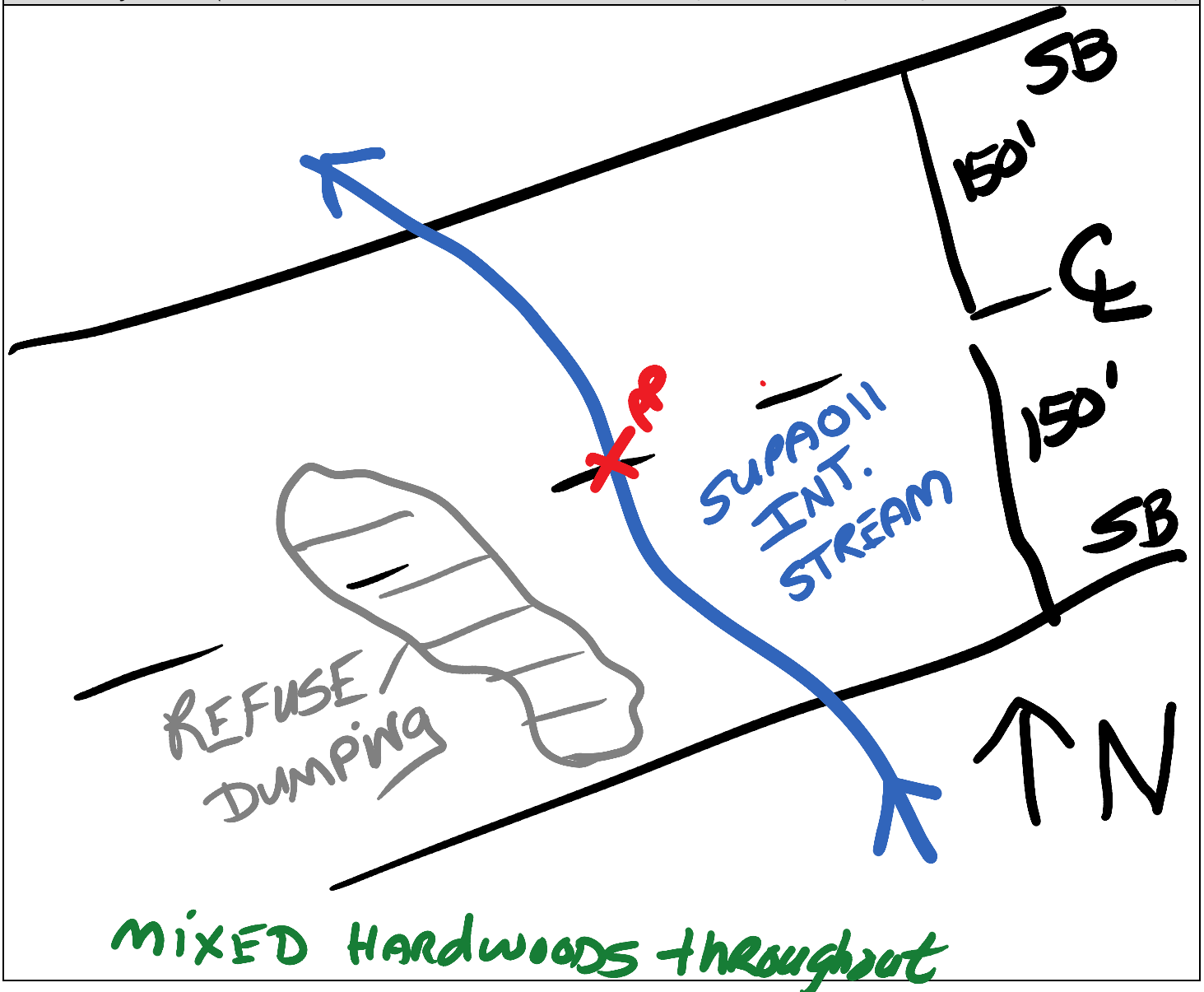
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers to fish movement; fair aquatic habitat; minimum disturbance by livestock or man.

Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man.

Notes:

Unnamed Tributary to Trubie Run, continues out of corridor both directions

Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features)





Waterbody SUPA00101 facing southeast upstream



Waterbody SUPA00111 facing northwest downstream