

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: Srae112		Date: 5/2/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: kno, cg
Photos: 3 photos			
Tract Number(s): Unnamed tract south of 04-002-B019		Nearest Milepost: 60.6	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: 7 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: .5 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: 10 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 15 ft.	Width of Waterbody - Water Edge to Water Edge: 6 ft.	Depth of Water: <i>(Approx.)</i> .2 ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1 fps	Bank height: Right: 1 ft. Left: 4 ft.
Bank slope: Right: 5 degrees Left: 30 degrees		N/A <input type="checkbox"/>	
Qualitative Attributes			
Water Appearance: <i>(check one)</i> <input 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: _____% 20% 20% 20% 20% 20% _____% _____%			
Width of Riparian Zone: 50 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> 13 in.		25 in.	
Dominant Bank Vegetation <i>(list)</i> : Tulip tree, sycamore, yellow birch			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Riffle, pool			
Aquatic Organisms Observed <i>(list)</i> : none observed, heavy rainfall			
T&E Species Observed <i>(list)</i> : none observed			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Bank modification			
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:

Srae112

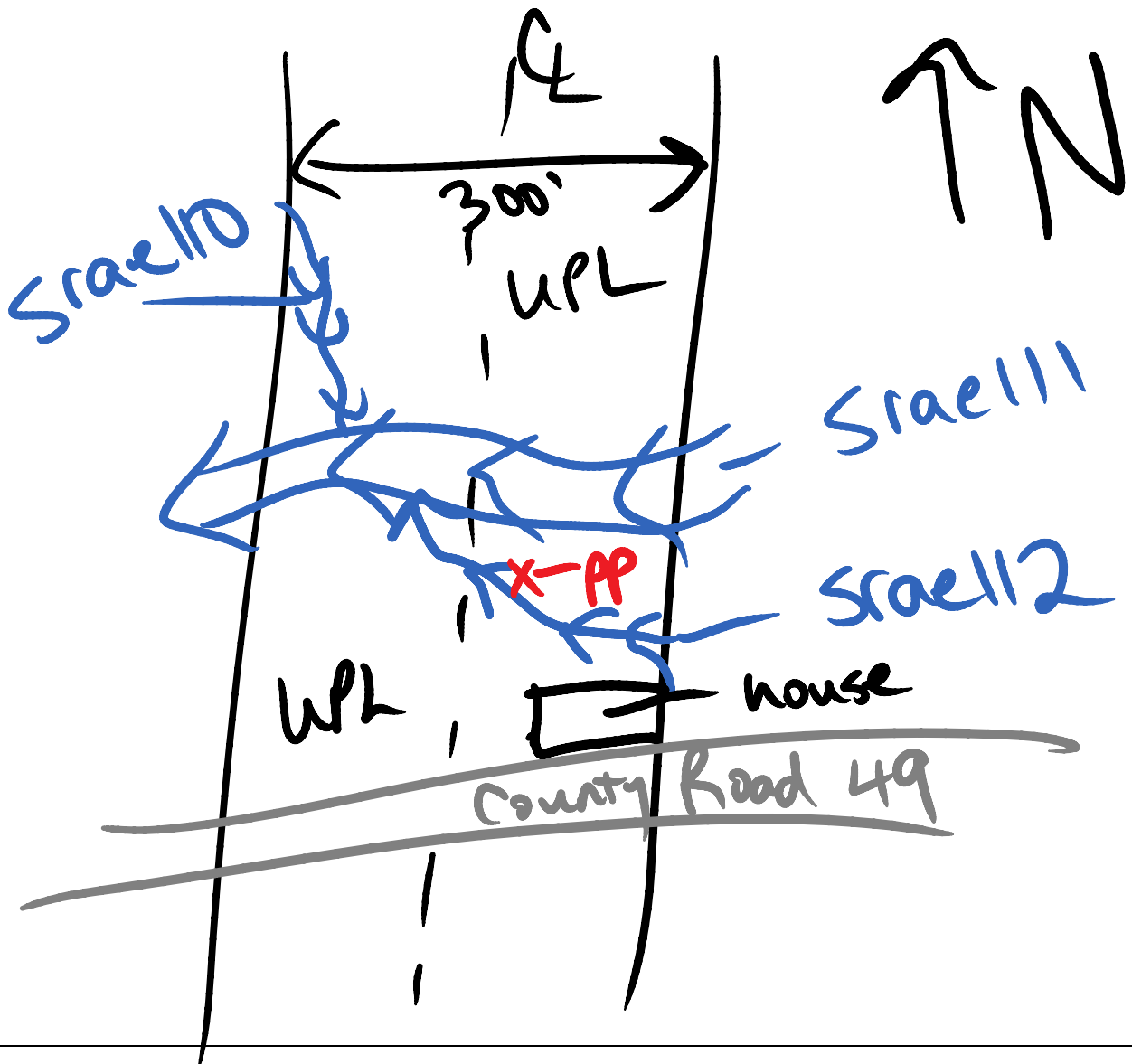
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae112 facing southeast upstream



Waterbody srae112 facing west downstream



Waterbody srae112 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Valley Fork	
Waterbody ID: Srae188		Date: 6/24/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, SA
Photos: 1-3			
Tract Number(s): 04-002-B073		Nearest Milepost: NA	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 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>35</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: <u>2</u> ft.		<input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input checked="" 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 checked="" type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>60</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>25</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>35</u> ft.	Depth of Water: <i>(Approx.)</i> <u>4</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>2.5</u> fps	Bank height Right: <u>7</u> ft. Left: <u>7</u> ft.	Bank slope Right: <u>60</u> degrees Left: <u>45</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>			
% of Substrate: _____% <u>25</u> % <u>25</u> % <u>25</u> % <u>25</u> % _____% _____% _____%			
Width of Riparian Zone: _____ 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>6</u> in. <u>1</u> in.	
Dominant Bank Vegetation <i>(list)</i> : Tuliptree, birch, Virginia creeper, parsnip			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Boulders, riffles			
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): Bank revetment, bridged			
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:

Srae188

^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.

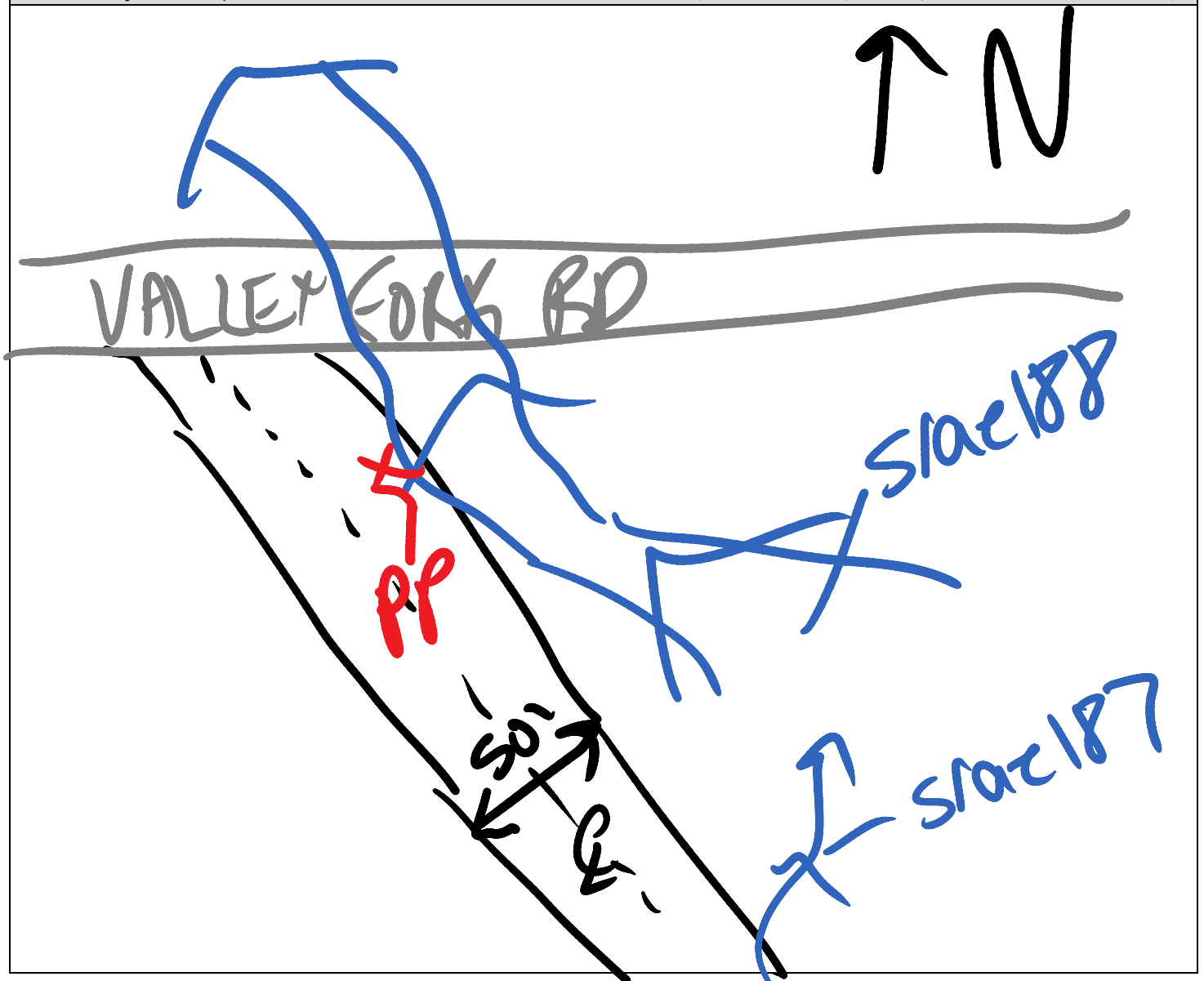
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent flash flooding in area. Water is high, turbid, and fast.

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





Waterbody SRAE188 facing southeast upstream



Waterbody SRAE188 facing northwest downstream



Waterbody SRAE188 facing northeast across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: Srae118		Date: 5/7/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B071/072		Nearest Milepost: 60.8	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 checked="" type="checkbox"/> Ephemeral <input 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>	
OHWM Height: _ 0.25 _ 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 <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 checked="" 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 _ 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"/> _ 0.1 _ ft.
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"/>	Bank height Right: _ 3 _ ft. Left: _ 2 _ ft.	Bank slope Right: _ 45 _ degrees Left: _ 30 _ 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> 5 </u> % <u> 20 </u> % <u> 30 </u> % <u> 40 </u> % <u> 5 </u> % _____ % _____ %			
Width of Riparian Zone: _ 12 _ ft. N/A <input 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 </u> in. <u> 1 </u> in.		
Dominant Bank Vegetation <i>(list)</i> : Maple, buckeye, nettle, birch			
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): Culverted beneath 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 checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

Srae118

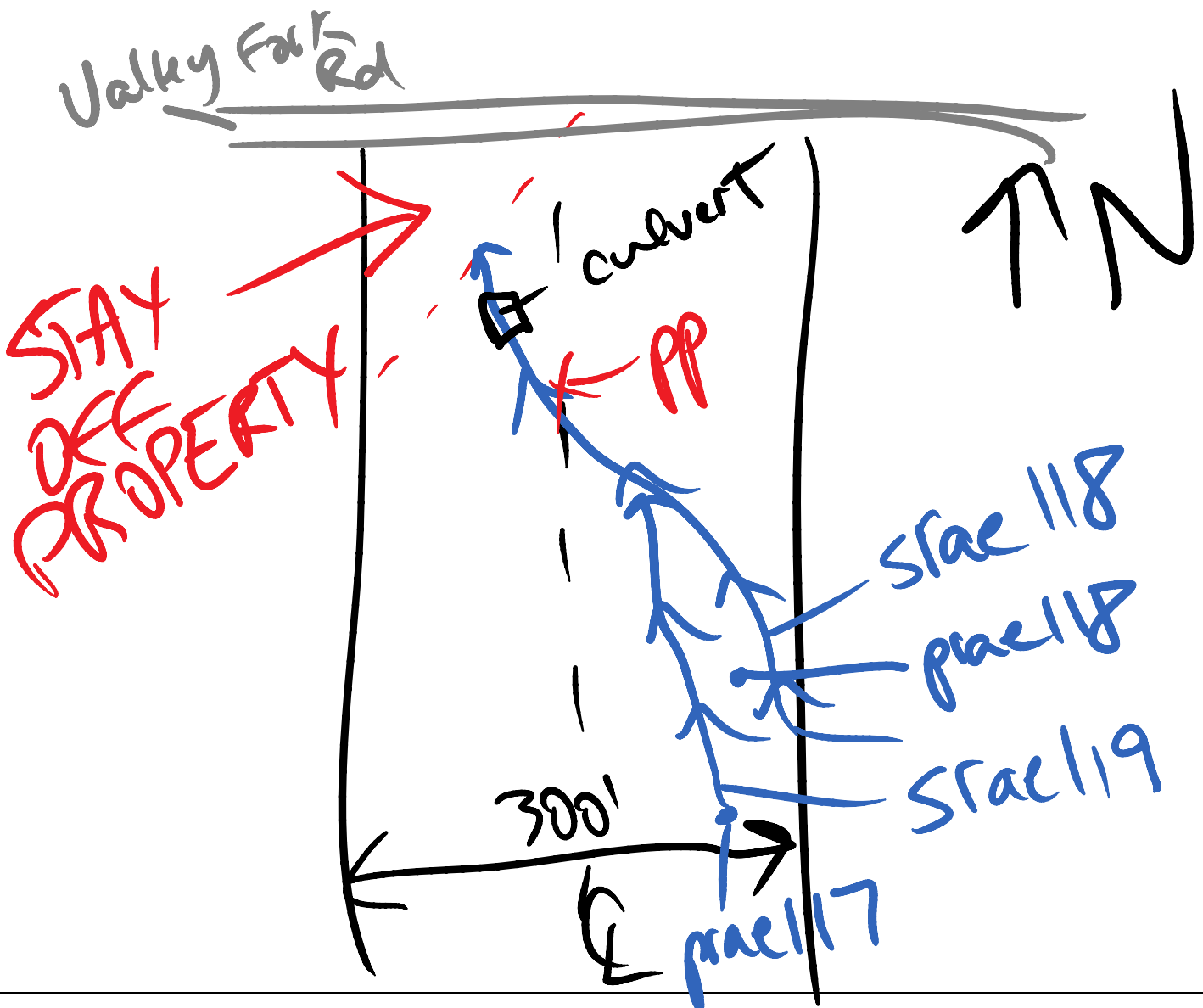
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAE118 facing south upstream



Waterbody SRAE118 facing north downstream



Waterbody SRAE118 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: Srae119		Date: 5/7/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B072		Nearest Milepost: 60.8	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 checked="" type="checkbox"/> Ephemeral <input 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</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 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 type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: <u>6</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>2</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.1</u> ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>1.5</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>2</u> ft. Left: <u>1</u> ft.	Bank slope Right: <u>30</u> degrees Left: <u>20</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>30</u> % <u>30</u> % <u>20</u> % _____% _____%			
Width of Riparian Zone: <u>12</u> 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> <u>8</u> in. <u>1</u> in.		
Dominant Bank Vegetation <i>(list)</i> : Ramps, blue beech, tuliptree			
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): none			
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:

Srae119

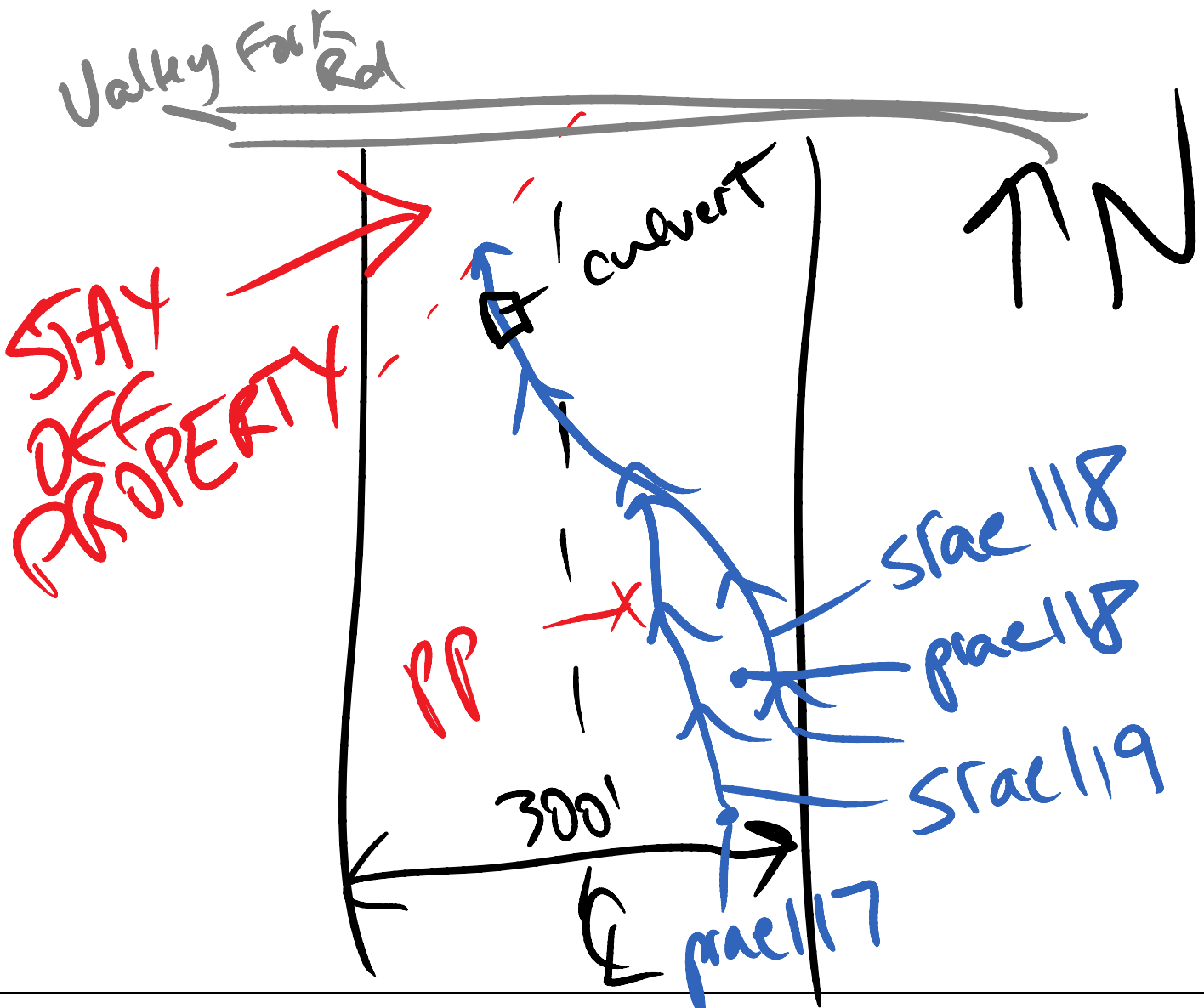
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAE119 facing south upstream



Waterbody SRAE119 facing north downstream



Waterbody SRAE119 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: Srae187		Date: 6/21/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, SA
Photos: 1-3			
Tract Number(s): 04-002-B025; 04-002-B073		Nearest Milepost: NA	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: 8 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.5 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 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	
Width of Waterbody - Top of Bank to Top of Bank: 14 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 7 ft.	Width of Waterbody - Water Edge to Water Edge: 7 ft.	Depth of Water: <i>(Approx.)</i> 0.25 ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1 fps	Bank height: Right: 4 ft. Left: 2 ft.
N/A <input type="checkbox"/>		Bank slope: Right: 80 degrees Left: 30 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: _____% 20% 40% 20% 15% 5% _____% _____%			
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		
Avg. DBH of Dominants: <i>(approx.)</i> 10 in. 1 in.			
Dominant Bank Vegetation <i>(list)</i> : Nettle, tuliptree, maple, birch, fern			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Step pools			
Aquatic Organisms Observed <i>(list)</i> : Salamanders, crayfish			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Adjacent to road			
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:

Srae187

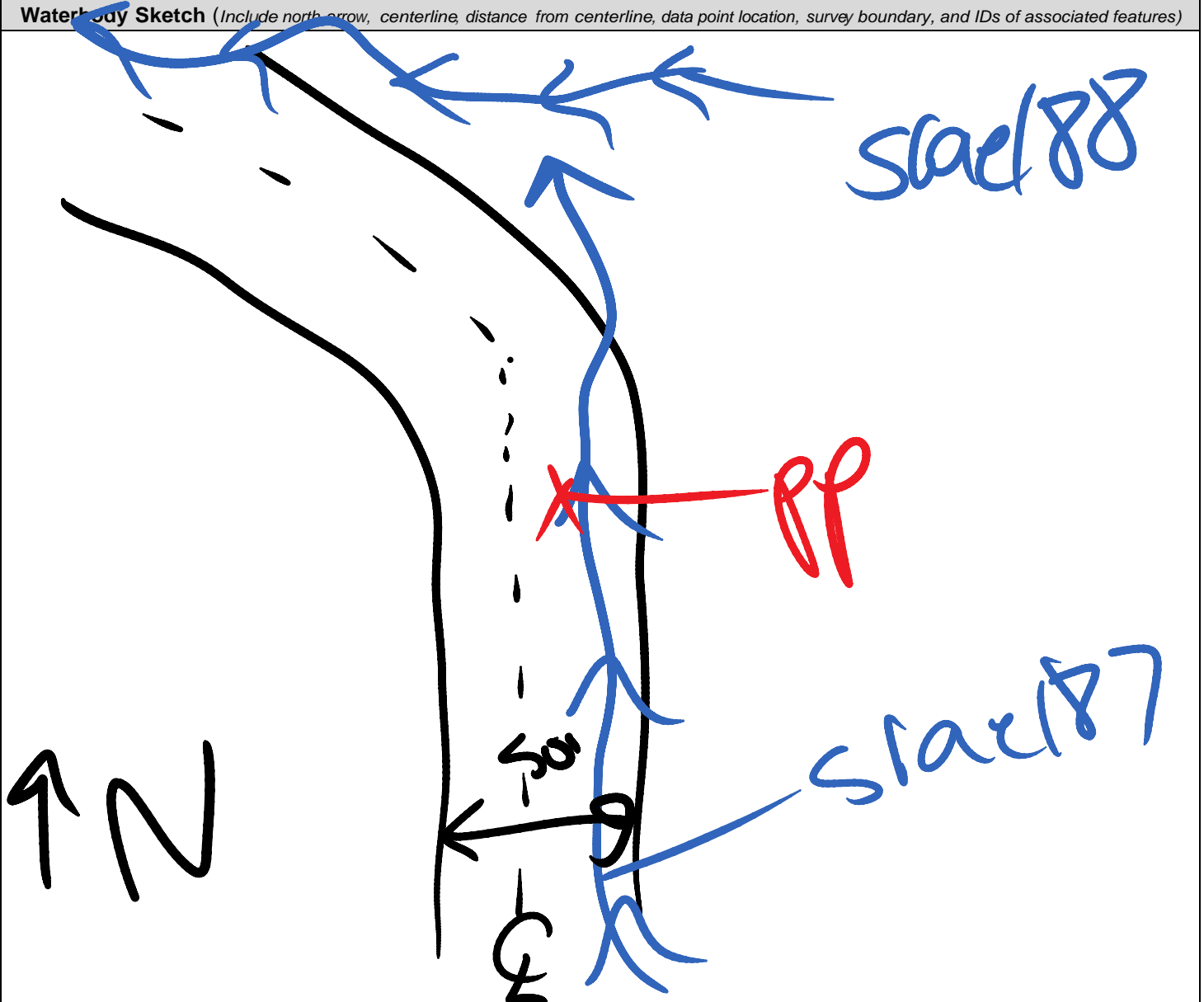
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAE187 facing southwest upstream



Waterbody SRAE187 facing northeast downstream



Waterbody SRAE187 facing southeast across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: srae120		Date: 05/07/16	
State: WV	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 9, 10, 11			
Tract Number(s): 04-002-B072		Nearest Milepost: 60.9	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 checked="" type="checkbox"/> Ephemeral <input 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: 6 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: .10 ft.		<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 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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 8 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 8 ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> y ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> .1ft.
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"/>	Bank height Right: 2ft. Left: 2 ft.	Bank slope Right: 40 degrees Left: 35degrees
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: _____% _____% 20% 10% 5% 65% _____% _____%			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> 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 Avg. DBH of Dominants: <i>(approx.)</i> 5 in. 1 in.		
Dominant Bank Vegetation <i>(list)</i> : Trees, include American Beech, and Yellow Birch. Shrubs include American Beech, Striped Maple, and Yellow Birch. Herbs include Jewelweed, Ramps, False Mitterworf Ferns and Trillium.			
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): road cuts			
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:

srae120

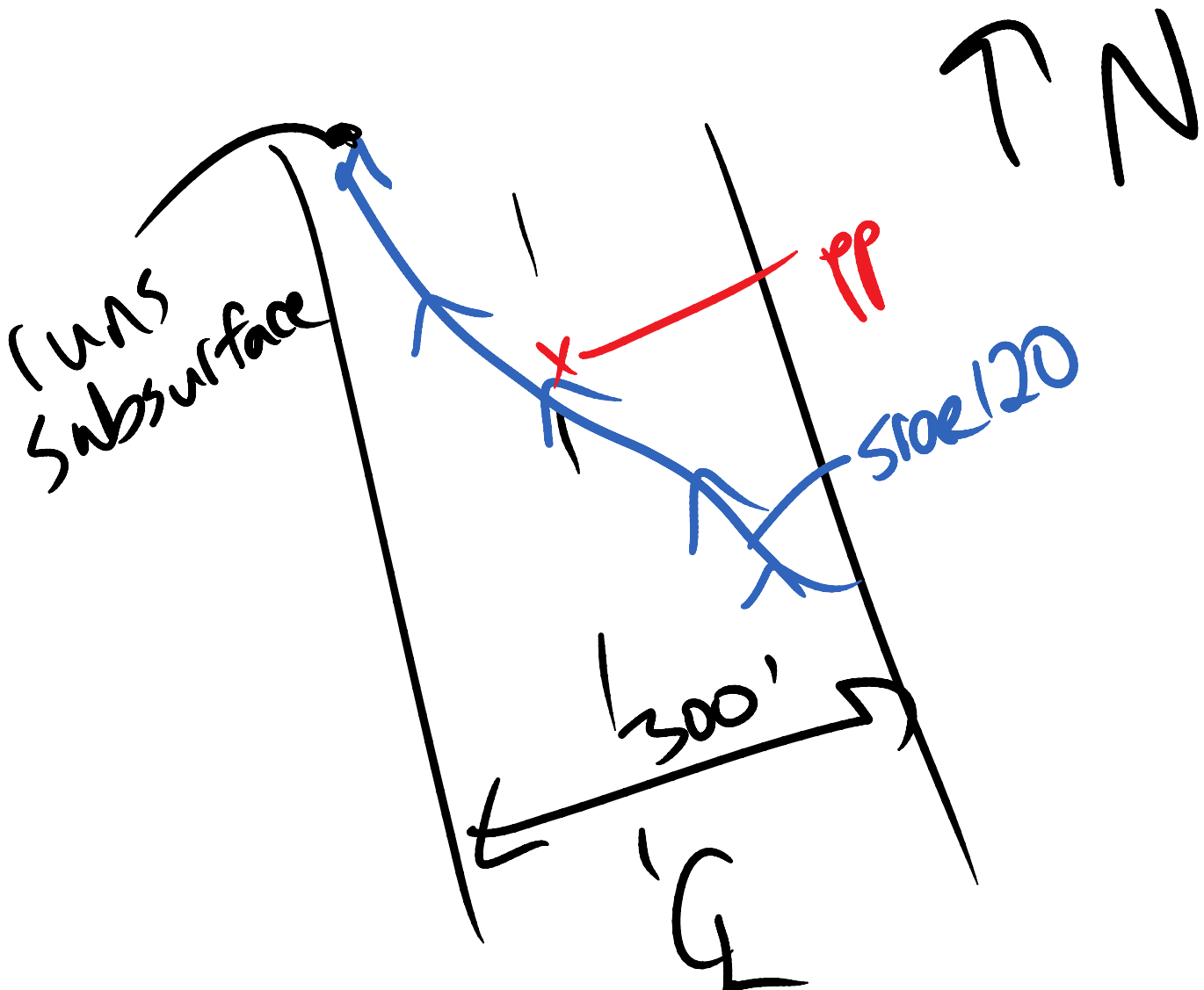
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAE120 facing south upstream



Waterbody SRAE120 facing north downstream



Waterbody SRAE120 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: srae121		Date: 5/10/2016	
State: WV	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): Unknown		Nearest Milepost: 61.1	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 checked="" type="checkbox"/> Ephemeral <input 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 _ ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: _ 2 _ 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 checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: _ 15 _ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _ 8 _ ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> _ 3 _ ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> _ 1 _ 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 _ ft. Left: _ 4 _ ft.	Bank slope Right: _ 30 _ degrees Left: _ 30 _ 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: _____ % _____ % <u>10</u> % <u>5</u> % _____ % <u>85</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>12</u> in. <u>2</u> in.		
Dominant Bank Vegetation <i>(list)</i> : Trees Black Cherry, Sugar Maple, Black Walnut, violets, stinging nettle, Virginia knotweed			
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): Road crossing			
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:

srae121

^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 srae121 facing southeast upstream



Waterbody srae121 facing northwest downstream



Waterbody srae121 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: srae122		Date: 5/10/2016	
State: WV	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): unknown		Nearest Milepost: 61.1	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 checked="" type="checkbox"/> Ephemeral <input 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: _ 2 _ ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: _ .2 _ ft.		<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	
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 _ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _ 10 _ 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"/> _ .1 _ ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _ .25 _ fps N/A <input type="checkbox"/>	Bank height Right: _ 4 _ ft. Left: _ 4 _ ft.	Bank slope Right: _ 35 _ degrees Left: _ 35 _ 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>100</u> % _____ % _____ %			
Width of Riparian Zone: _ 10 _ ft. N/A <input type="checkbox"/>	Vegetative Layers: <i>(check all that apply)</i> <input checked="" type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> _ 12 _ in. ___ in.			
Dominant Bank Vegetation <i>(list)</i> : Trees Black Cherry, Tulip tree, Sugar Maple, Black Walnut, violets, golden ragwort			
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): none			
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:

srae122

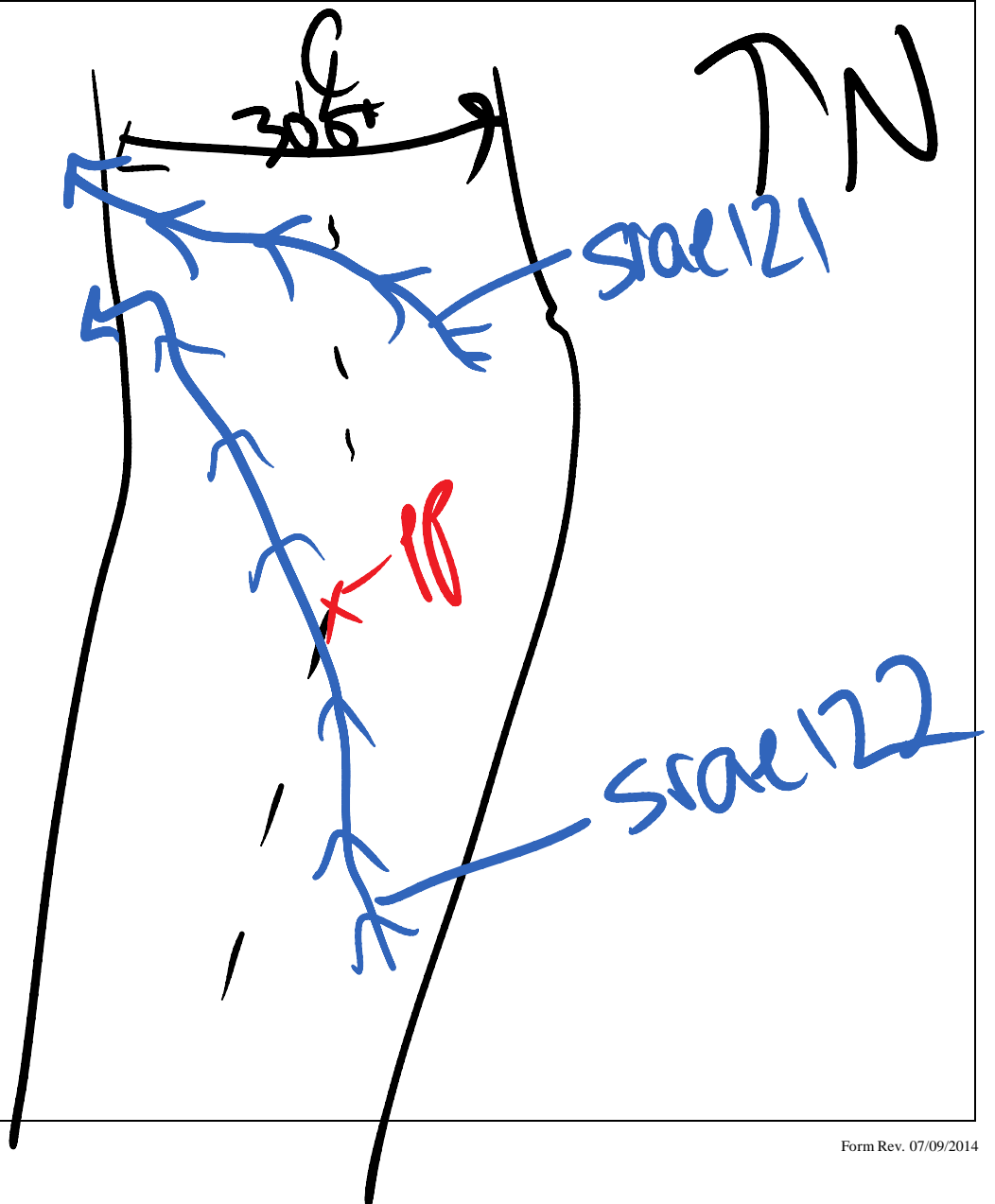
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae122 facing southeast upstream



Waterbody srae122 facing northwest downstream



Waterbody srae122 facing southwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Valley Fork	
Waterbody ID: srae123		Date: 5/10/2016	
State: WV	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): unknown		Nearest Milepost: 61.2	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 checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 8 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: .1 ft.		<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 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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 20 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 11 ft.	Width of Waterbody - Water Edge to Water Edge: 8 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 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: 5 ft. Left: 7 ft.		Bank slope Right: 45 degrees Left: 45 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: _____% _____% 15% 10% 5% 70% _____% _____%			
Width of Riparian Zone: 10 ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input type="checkbox"/>		<input checked="" type="checkbox"/> Trees: <input type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs Avg. DBH of Dominants: 12 in. ___ in.	
N/A <input type="checkbox"/>			
Dominant Bank Vegetation <i>(list)</i> : Trees Black Cherry, Stripe Maple, Sugar Maple, Witch hazel shrub, violets, false Solomon's Seal, ,stinging nettle			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools):			
Aquatic Organisms Observed <i>(list)</i> :			
T&E Species Observed <i>(list)</i> :			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Dammed outside corridor			
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:

srae123

^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.

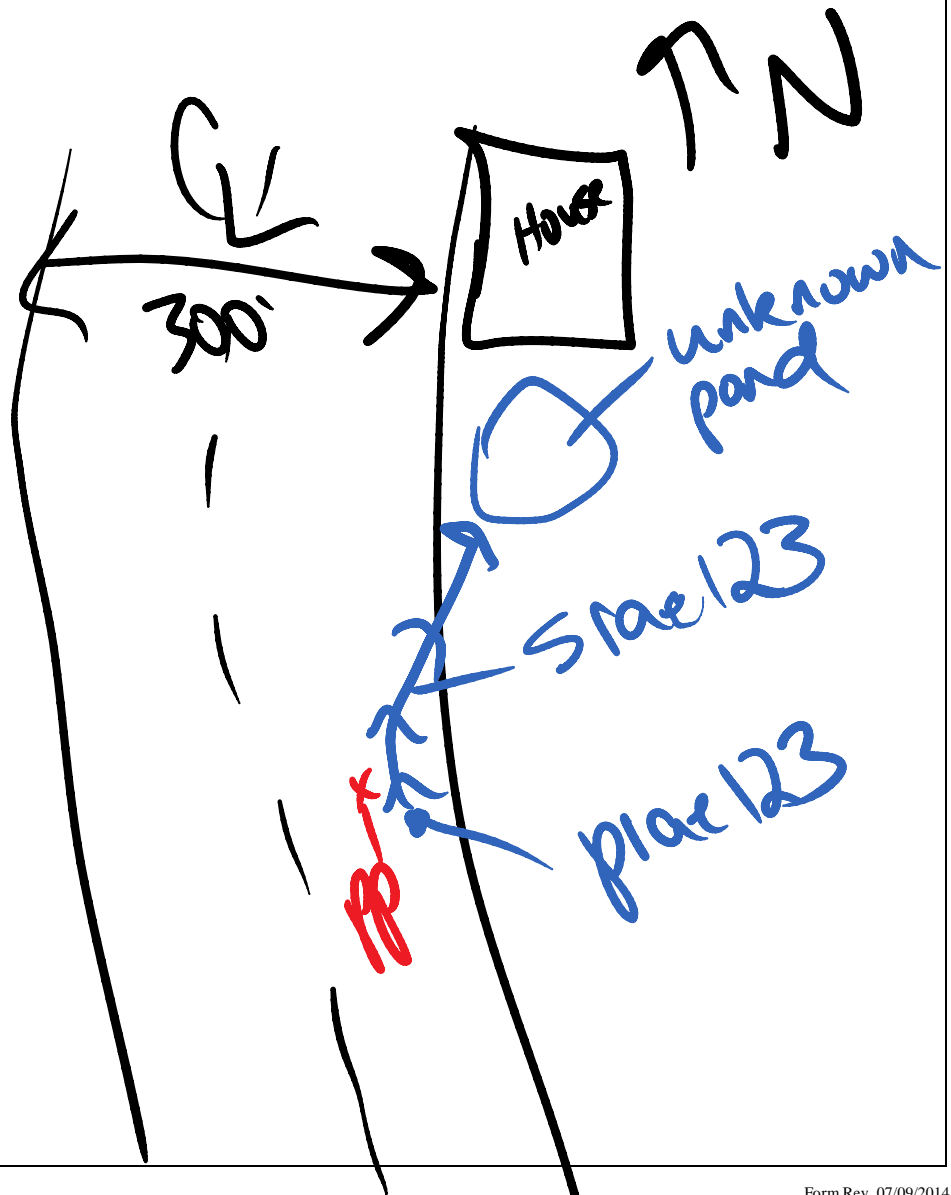
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Associated with seep prae123

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





Waterbody srae123 facing south upstream



Waterbody srae123 facing north downstream



Waterbody srae123 facing west across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae134		Date: 5/23/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, RP
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 61.3	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: 5 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.5 ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 30 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 4 ft.	Width of Waterbody - Water Edge to Water Edge: 4 ft.	Depth of Water: <i>(Approx.)</i> 0.1 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> 0.1 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 7 ft. Left: 8 ft.		Bank slope Right: 30 degrees Left: 45 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: 8 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> 15 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Maple, tulip tree, jewelweed			
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): none			
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:

Srae134

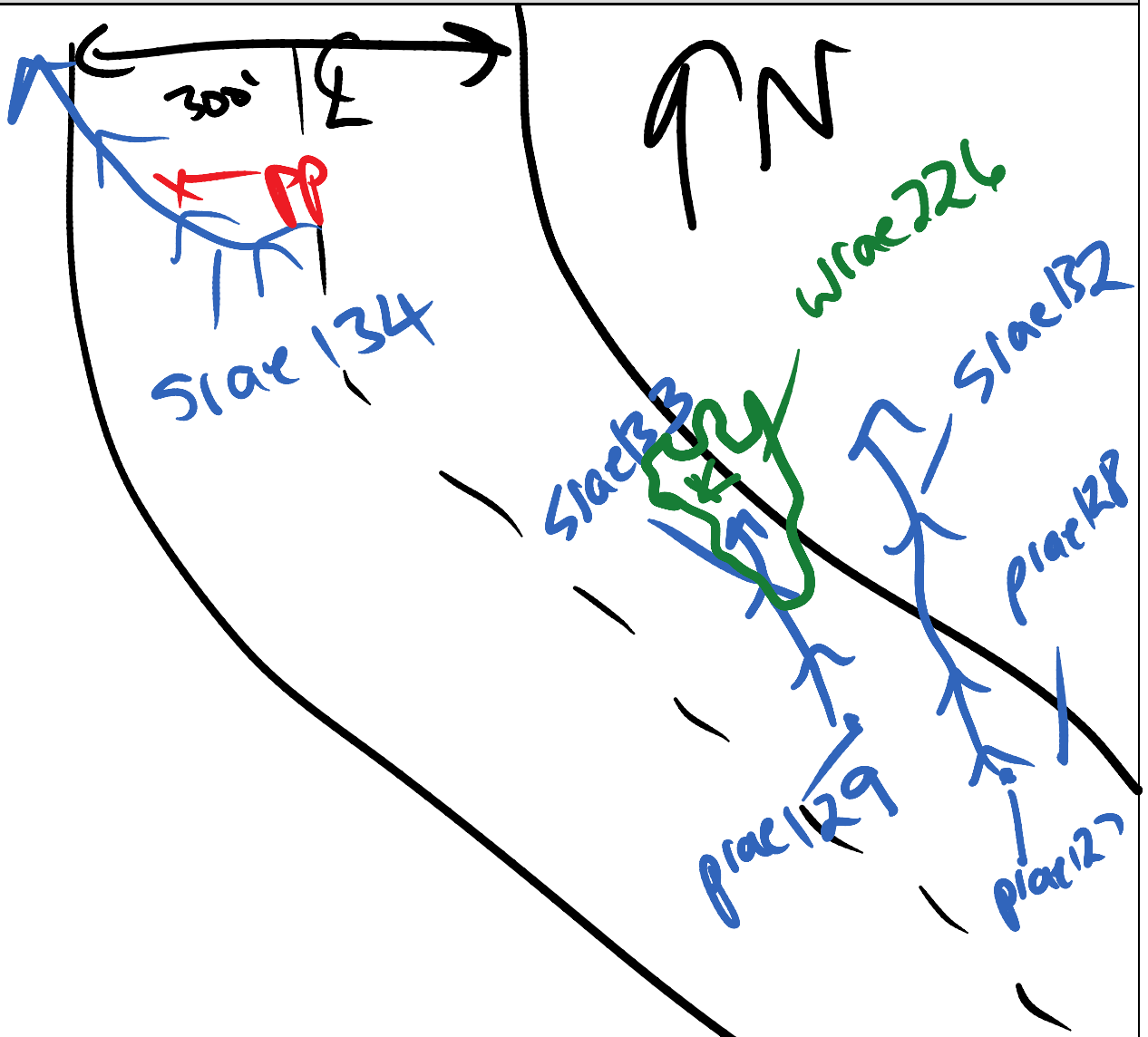
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae134 facing east upstream



Waterbody srae134 facing west downstream



Waterbody srae134 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae133		Date: 5/23/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, RP
Photos: 1-4			
Tract Number(s): 04-002-B025		Nearest Milepost: 61.4	Associated Wetland ID(s): Wrae226
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: 8 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.5 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 <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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 30 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2 ft.	Width of Waterbody - Water Edge to Water Edge: 2 ft.	Depth of Water: <i>(Approx.)</i> 0.1 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> 0.5 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 5 ft. Left: 5 ft.		Bank slope Right: 70 degrees Left: 60 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 type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% 20% 20% _____% 60% _____% _____%			
Width of Riparian Zone: 10 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> 6 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Maple, goldenrod, nettle			
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): Road cut			
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:

Srae133

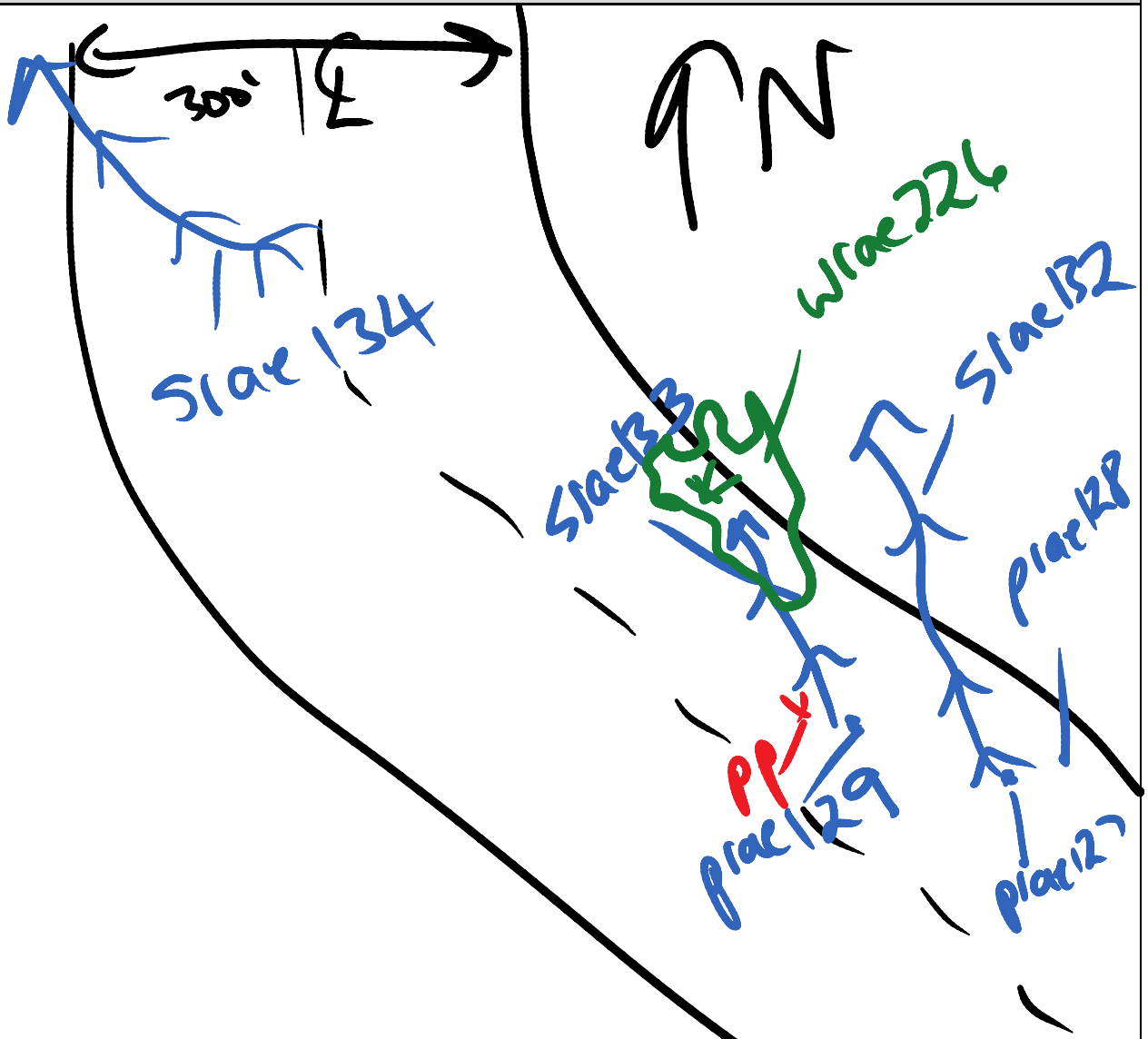
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae133 facing southeast upstream



Waterbody srae133 facing northwest downstream



Waterbody srae133 facing southwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae132		Date: 5/23/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, RP
Photos: 1-5			
Tract Number(s): 04-002-B025		Nearest Milepost: 61.4	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: _3_ ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: _0.25_ 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 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 type="checkbox"/> Soil characteristic change	
Width of Waterbody - Top of Bank to Top of Bank: _6_ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _2_ 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"/> _0.1_ ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _0.5_ fps N/A <input type="checkbox"/>	Bank height Right: _2_ ft. Left: _2_ ft.	Bank slope Right: _30_ degrees Left: _30_ 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>5</u> % <u>5</u> % <u>10</u> % <u>80</u> % _____% _____%			
Width of Riparian Zone: _10_ ft. N/A <input 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>6</u> in. <u>1</u> in.			
Dominant Bank Vegetation <i>(list)</i> : Maple, jewelweed, sedges			
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> : salamanders			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Road cut creates stream exposing subsurface flow			
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:

Srae132

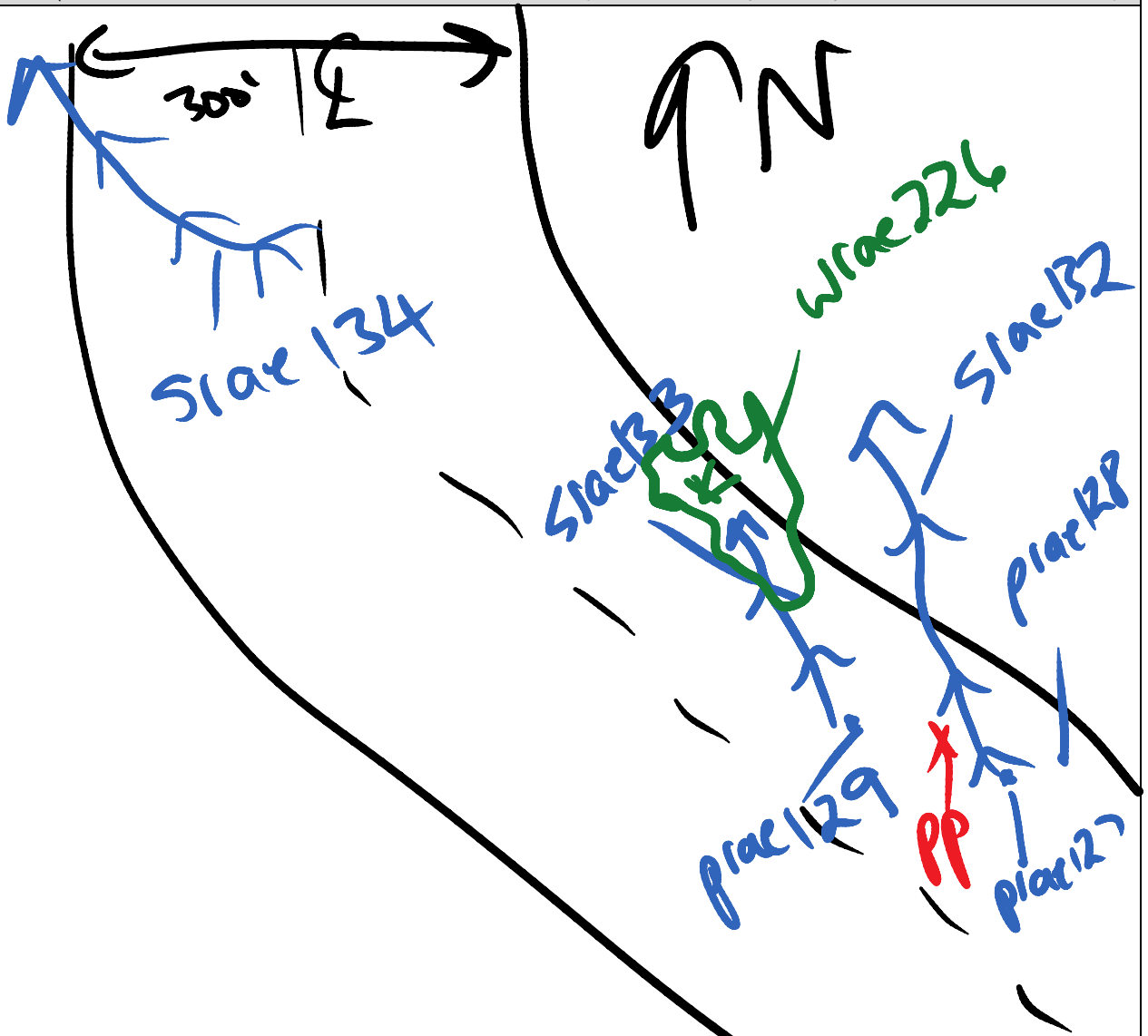
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae132 facing southeast upstream



Waterbody srae132 facing northwest downstream



Waterbody srae132 facing northeast across

Open Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Unnamed pond	
Waterbody ID: Orae113		Date: 5/23/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, RP
Photos: 1-2			
Tract Number(s): 04-002-B025		Nearest Milepost: 61.7	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 type="checkbox"/> Stock Pond <input checked="" 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 type="checkbox"/> Permanently Flooded <input type="checkbox"/> Semipermanently Flooded <input checked="" type="checkbox"/> Seasonally Flooded <input type="checkbox"/> Temporarily Flooded			
OHWM Height: <u>0.5</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 type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Depth of Water: <u>0.25</u> ft. N/A <input type="checkbox"/>		Bank height (average): <u>1</u> ft.	Bank slope (average): <u>20</u> 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 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. 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>6</u> in. <u>2</u> in.	
Dominant Bank Vegetation <small>(list)</small> : Birch, goldenrod			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.)</small> : none			
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> : Adjacent to old logging road			
Waterbody is: <small>(check one)</small> <input checked="" type="checkbox"/> Natural <input 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:

Orae113

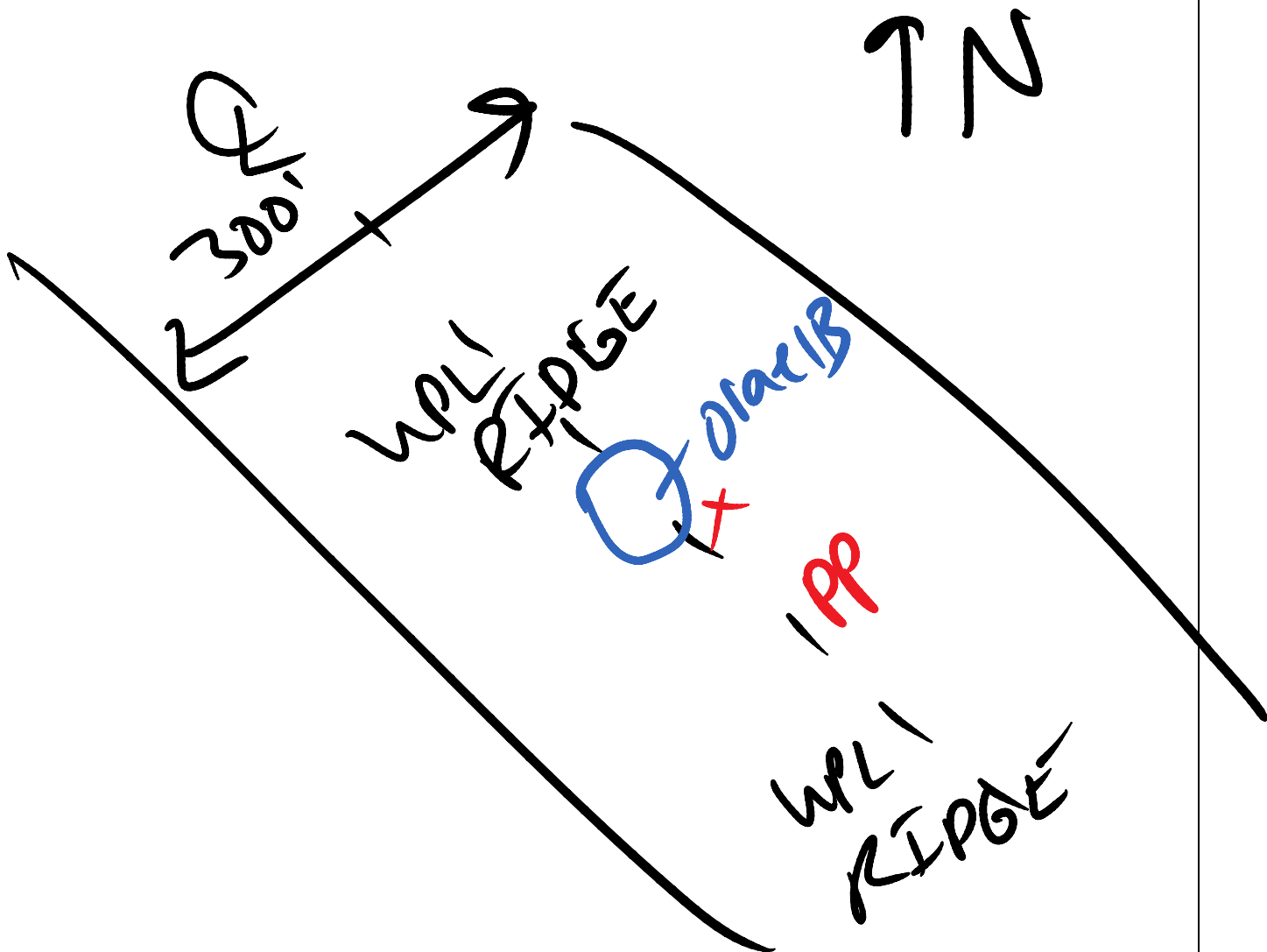
^a **High Quality:** Natural, natural bank vegetation around entire waterbody; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance by livestock or man.

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 orae113 facing east



Open waterbody orae113 facing west

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae131		Date: 5/23/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, RP
Photos: 1-4			
Tract Number(s): 04-002-B025		Nearest Milepost: 61.9	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 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 2 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 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 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 3 ft.	Width of Waterbody - Water Edge to Water Edge: 3 ft.	Depth of Water: <i>(Approx.)</i> 0.1 ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 0.75 fps	Bank height: Right: 4 ft. Left: 4 ft.
N/A <input type="checkbox"/>		Bank slope: Right: 45 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>			
% of Substrate: _____% _____% _____% <u>30</u> % <u>60</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</u> in. <u>1</u> in.	
Dominant Bank Vegetation <i>(list)</i> : Maple, Wood anemone, beech			
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): none			
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:

Srae131

^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.

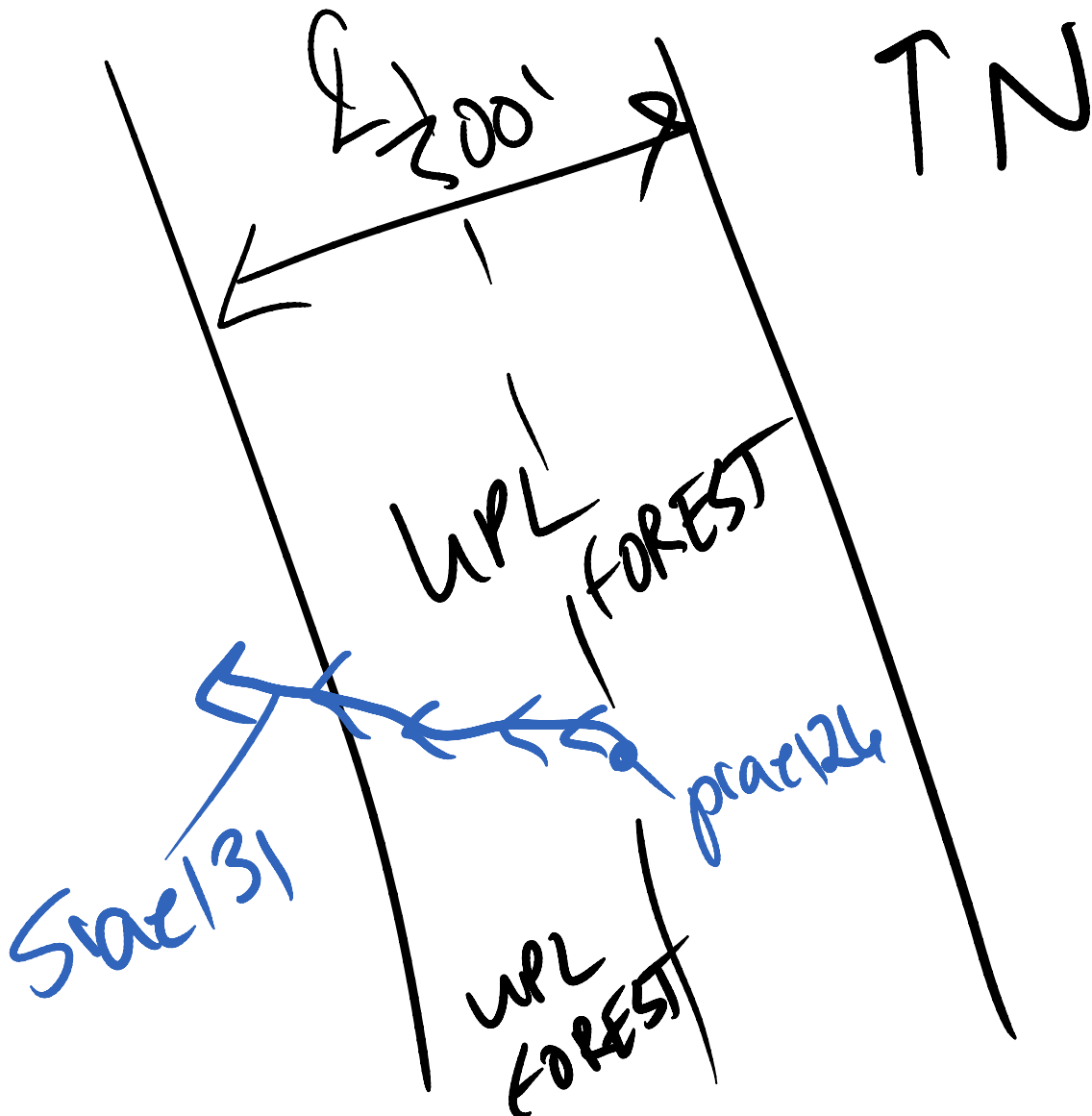
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

With spring point prae126

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





Waterbody srae131 facing southeast upstream



Waterbody srae131 facing northwest downstream



Waterbody srae131 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae130		Date: 5/20/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-4			
Tract Number(s): 04-002-B025		Nearest Milepost: 63.9	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: 6 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 1 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <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 checked="" type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 20 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 4 ft.	Width of Waterbody - Water Edge to Water Edge: 4 ft.	Depth of Water: <i>(Approx.)</i> 0.2 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> 0.75 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 4 ft. Left: 5 ft.		Bank slope Right: 20 degrees Left: 30 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 checked="" 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% 25% 35% 15% 15% _____% _____%			
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> 12 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Mayapple, beech, maple			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Large woody debris			
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): Strip mine bench headwaters			
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:

Srae130

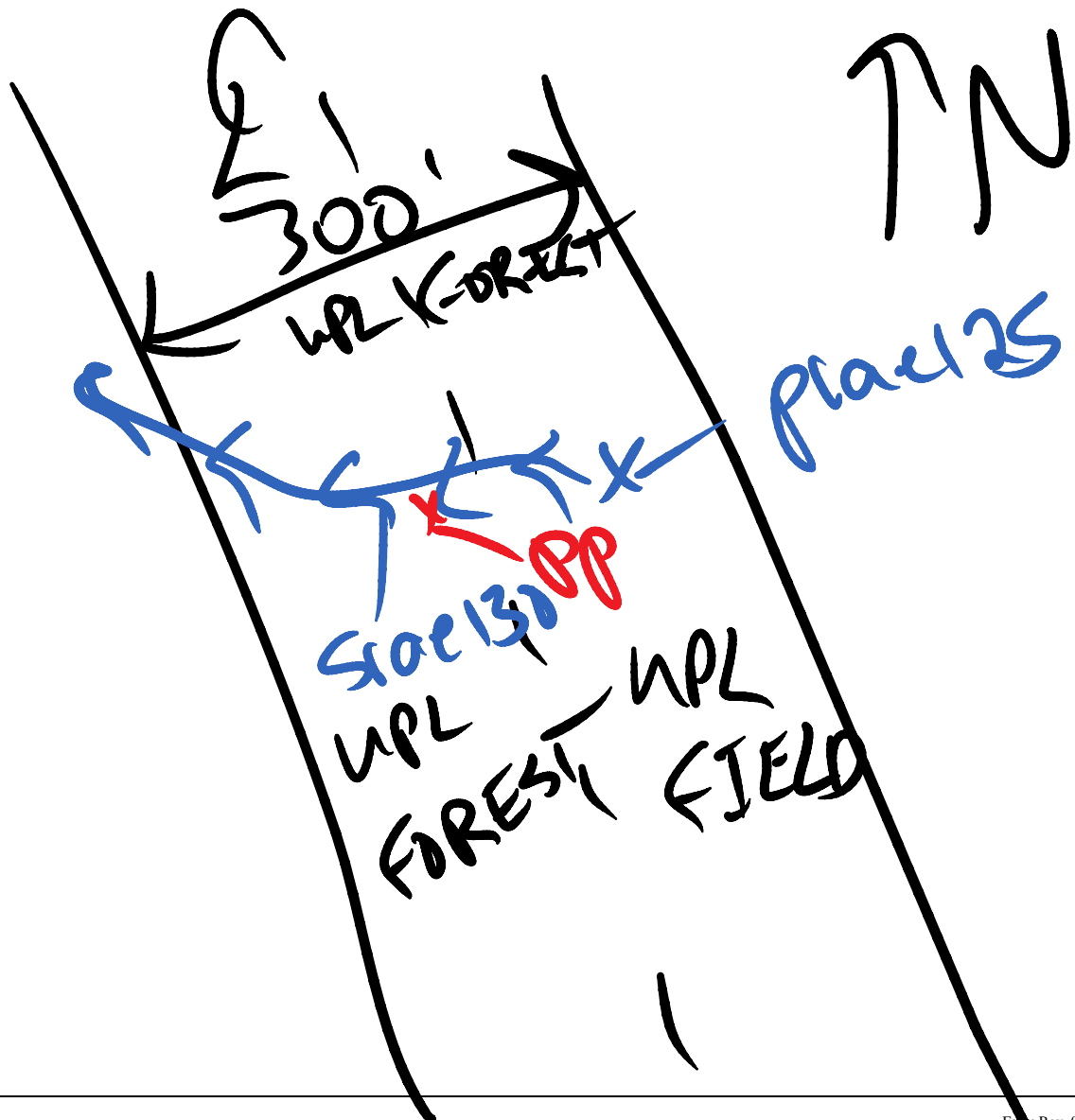
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae130 facing east upstream



Waterbody srae130 facing west downstream



Waterbody srae130 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae129		Date: 5/20/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.0	Associated Wetland ID(s): Wrae222, wrae223
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: _ 2 _ ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: _ 0.25 _ ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining	
N/A <input type="checkbox"/>		<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	
Width of Waterbody - Top of Bank to Top of Bank: _ 6 _ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _ 2 _ 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"/> _ 0.1 _ ft.
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"/>	Bank height Right: _ 2 _ ft. Left: _ 2 _ ft.	Bank slope Right: _ 30 _ degrees Left: _ 35 _ 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>30</u> % _____ % <u>40</u> % <u>30</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 type="checkbox"/> Saplings/Shrubs: <input checked="" type="checkbox"/> Herbs		
Avg. DBH of Dominants: <i>(approx.)</i> _____ in. _____ in.			
Dominant Bank Vegetation <i>(list)</i> : Rubus sp., grasses			
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): Strip mine bench			
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:

Srae129

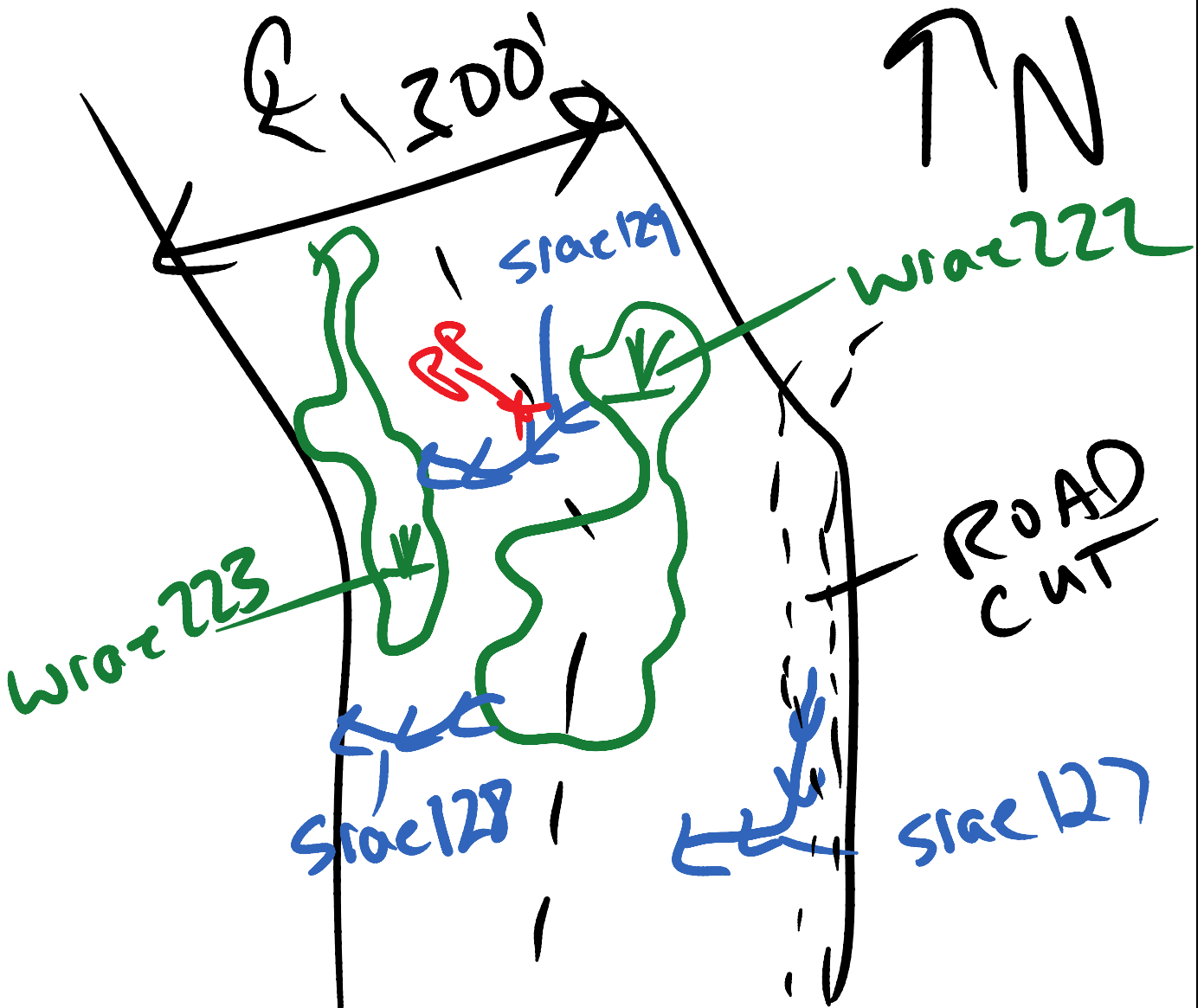
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae129 facing east upstream



Waterbody srae129 facing west downstream



Waterbody srae129 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae128		Date: 5/20/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.1	Associated Wetland ID(s): Wrae222
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 checked="" type="checkbox"/> Ephemeral <input 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: 2 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.25 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 <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	
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 checked="" type="checkbox"/> _____ ft.	Depth of Water: <i>(Approx.)</i> N/A <input checked="" type="checkbox"/> _____ ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _____ fps N/A <input checked="" type="checkbox"/>	Bank height Right: 4 ft. Left: 4 ft.	Bank slope Right: 45 degrees Left: 45 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 type="checkbox"/> Bedrock <input checked="" 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: _____% 20% 25% 25% 15% 15% _____% _____%			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> _____ ft.	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. 2 in.		
Dominant Bank Vegetation <i>(list)</i> : Birch, maple			
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): Strip mine benches			
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:

Srae128

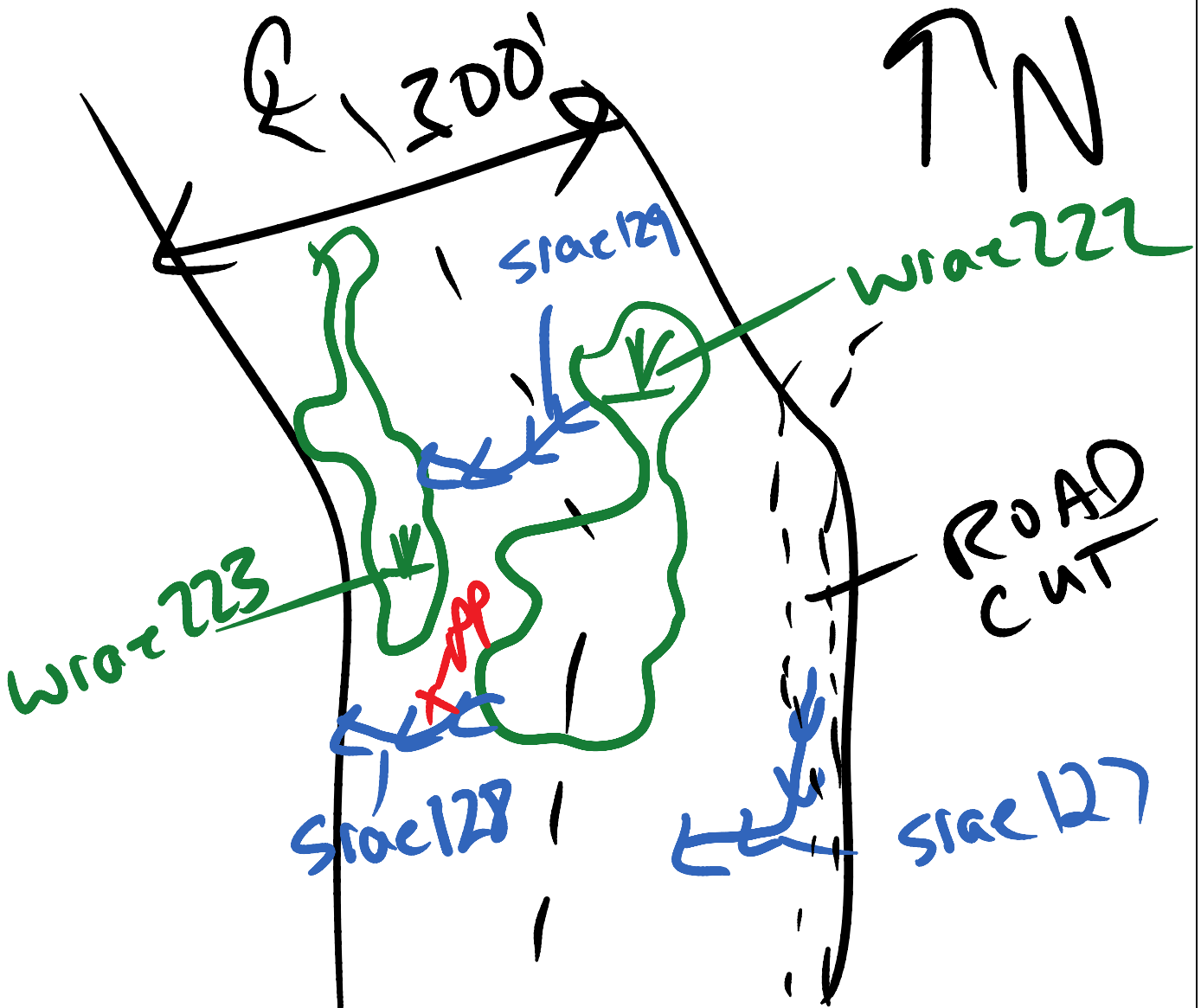
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae128 facing east upstream



Waterbody srae128 facing west downstream



Waterbody srae128 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae127		Date: 5/20/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.3	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: 2 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.5 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 <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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 4 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 2 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"/> .1 ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> 0.75 fps N/A <input type="checkbox"/>	Bank height Right: .25 ft. Left: .25 ft.	Bank slope Right: 25 degrees Left: 25 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: ___% ___% ___% ___% 10% 90% ___% ___%			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> ___ 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 Avg. DBH of Dominants: <i>(approx.)</i> ___ in. ___ in.		
Dominant Bank Vegetation <i>(list)</i> : Yellow birch, red maple, red pine, sedges			
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): Strip mine bench			
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:

Srae127

^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.

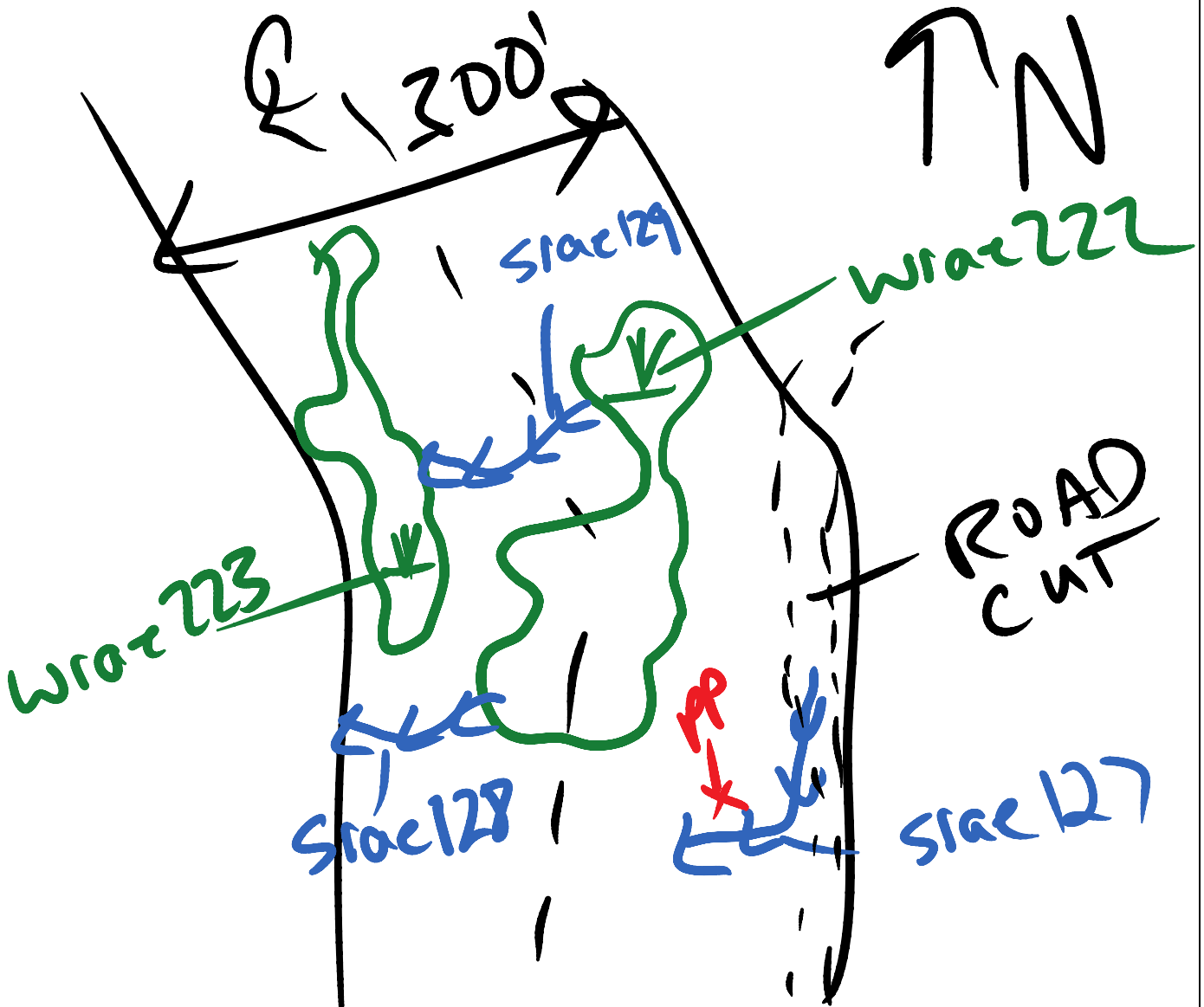
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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 dissipates.

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





Waterbody srae127 facing east upstream



Waterbody srae127 facing west downstream



Waterbody srae127 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elk River	
Waterbody ID: Srae126		Date: 5/20/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.4	Associated Wetland ID(s): Wrae220
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: 2 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.5 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 <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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 8 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1 ft.	Width of Waterbody - Water Edge to Water Edge: 1 ft.	Depth of Water: <i>(Approx.)</i> 0.1 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> 0.75 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 6 ft. Left: 6 ft.		Bank slope Right: 35 degrees Left: 45 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 checked="" 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: 90 % _____ % _____ % _____ % _____ % 10 % _____ % _____ %			
Width of Riparian Zone: _____ ft.		Vegetative Layers: <i>(check all that apply)</i>	
N/A <input checked="" 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> : Yellow birch, tag alder, sedges			
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): Strip mine bench			
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:

Srae126

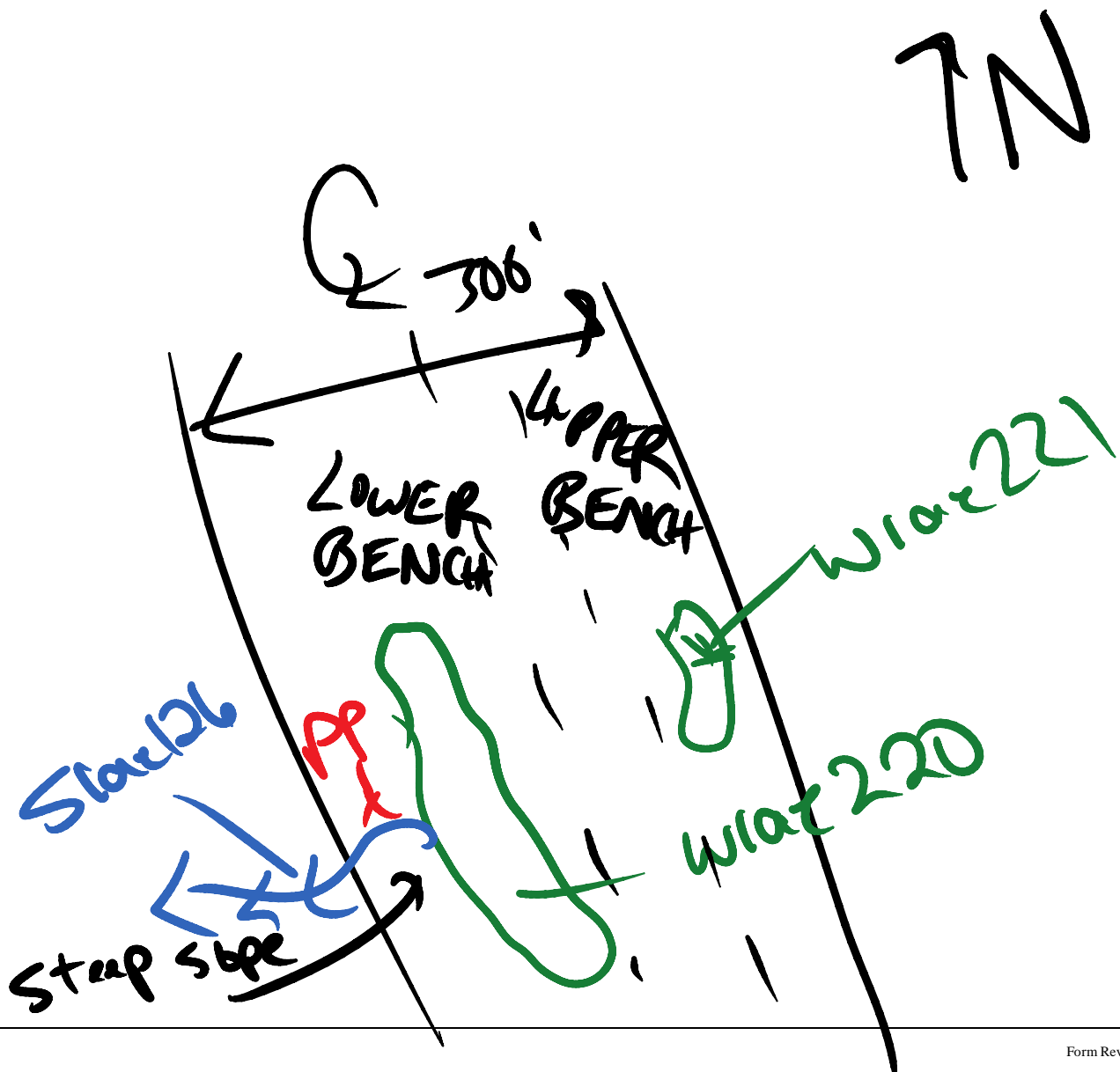
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae126 facing east upstream



Waterbody srae126 facing west downstream



Waterbody srae126 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Rough Gap Run	
Waterbody ID: Srae125		Date: 5/19/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.9	Associated Wetland ID(s): Wrae216
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 checked="" type="checkbox"/> Ephemeral <input 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: 2 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.25 ft.		<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input checked="" 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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 8 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1 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 checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _____ fps N/A <input checked="" type="checkbox"/>	Bank height Right: 7 ft. Left: 7 ft.	Bank slope Right: 70 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: _____% _____% _____% <u>5</u> % _____% <u>95</u> % _____% _____%			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> _____ 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 Avg. DBH of Dominants: <i>(approx.)</i> <u>4</u> in. <u>1</u> in.		
Dominant Bank Vegetation <i>(list)</i> : Birch, ground cedar, maple			
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): Road runoff			
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:

Srae125

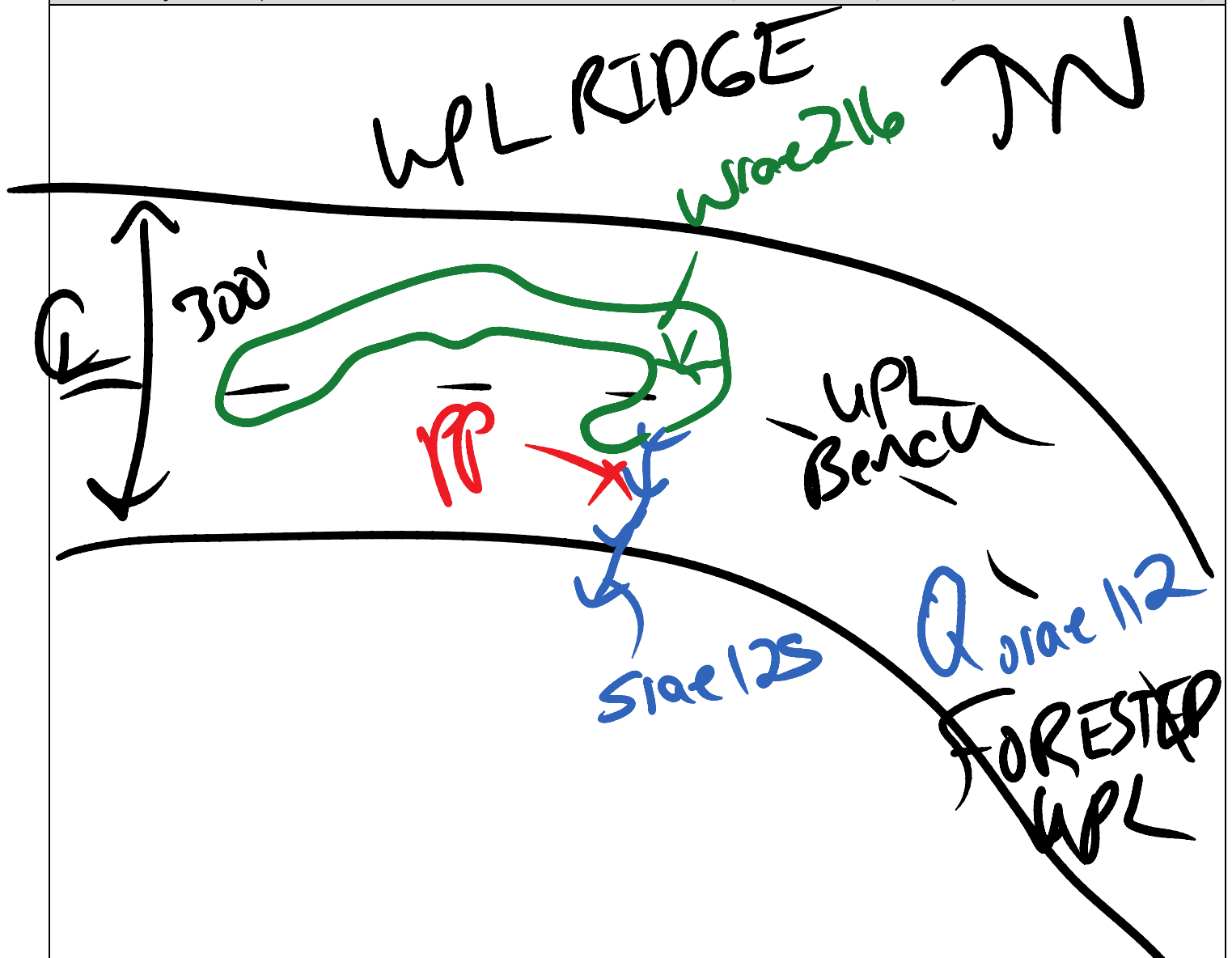
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 srae125 facing north upstream



Waterbody srae125 facing south downstream



Waterbody srae125 facing northwest across

Open Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Unnamed pond	
Waterbody ID: Orae112		Date: 5/19/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-2			
Tract Number(s): 04-002-B025		Nearest Milepost: 62.9	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 type="checkbox"/> Stock Pond <input checked="" 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 type="checkbox"/> Permanently Flooded <input type="checkbox"/> Semipermanently Flooded <input checked="" 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 type="checkbox"/> Abrupt plant community change	<input checked="" type="checkbox"/> Soil characteristic change	
Depth of Water: <u> 1 </u> ft. N/A <input type="checkbox"/>	Bank height (average): <u> 2 </u> ft.	Bank slope (average): <u> 20 </u> 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 type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input checked="" type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% _____% _____% <u> 50 </u> % <u> 50 </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 <small>(list)</small> : Striped maple, ground cedar, Yellow birch			
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.)</small> : none			
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> : none			
Waterbody is: <small>(check one)</small> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" 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:

Orae112

^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.

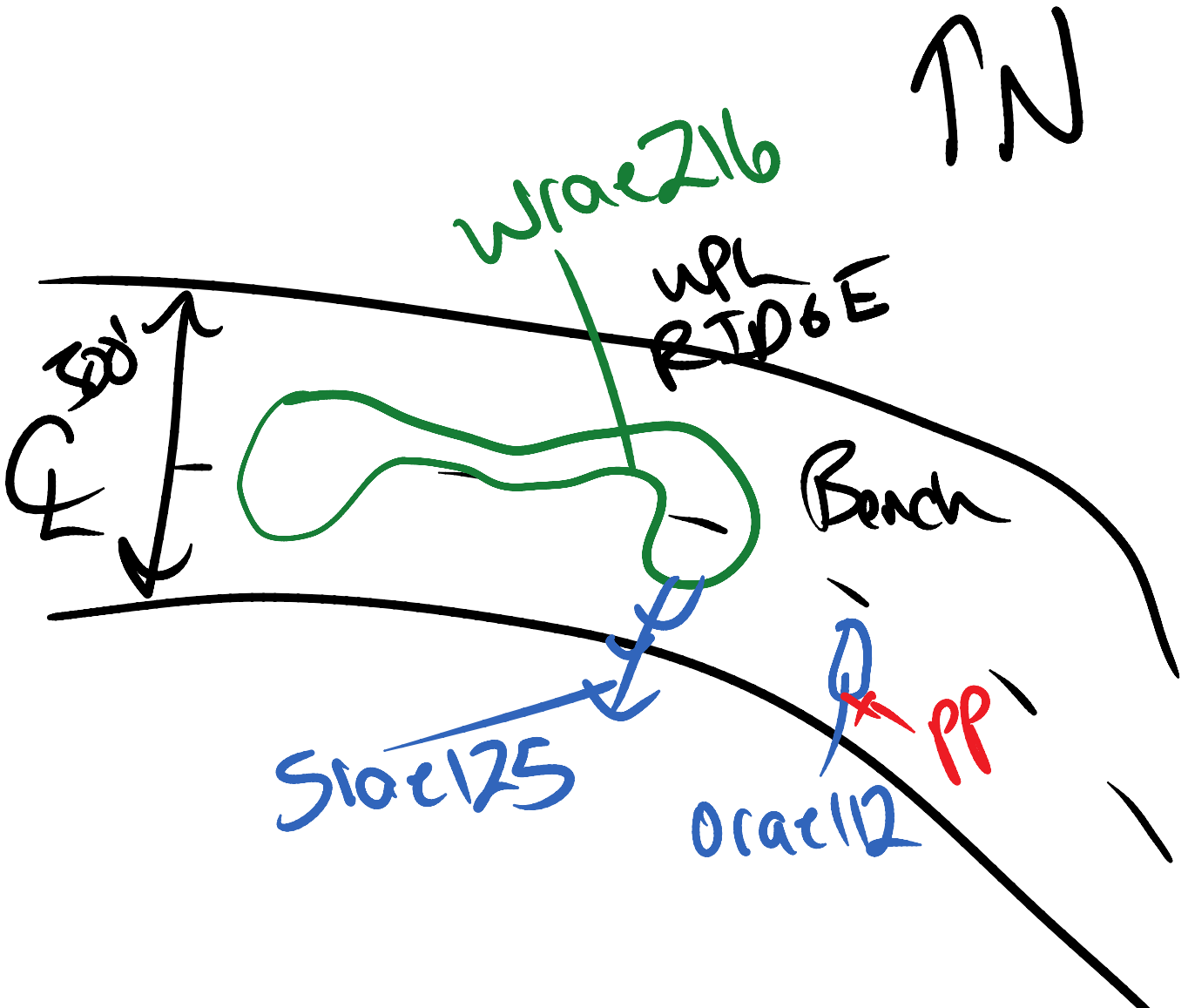
Moderate Quality: Altered by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or bank vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate odor; minor barriers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

Vernal pool

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





Open waterbody orae112 facing north



Open waterbody orae112 facing west

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Elkwater Fork	
Waterbody ID: Srae206		Date: 7/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, AS
Photos: 1-5			
Tract Number(s): unknown		Nearest Milepost: NA	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: pipeyard			
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: 6 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.5 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 <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: 20 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 3 ft.	Width of Waterbody - Water Edge to Water Edge: 3 ft.	Depth of Water: <i>(Approx.)</i> 0.1 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> 0.5 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 6 ft. Left: 6 ft.		Bank slope Right: 40 degrees Left: 50 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 checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _____% _____% _____% 10% 90% _____% _____% _____%			
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> 12 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Jewelweed, maple, tuliptree, blue beech			
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): Pasture runoff, tank			
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:

Srae206

^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.

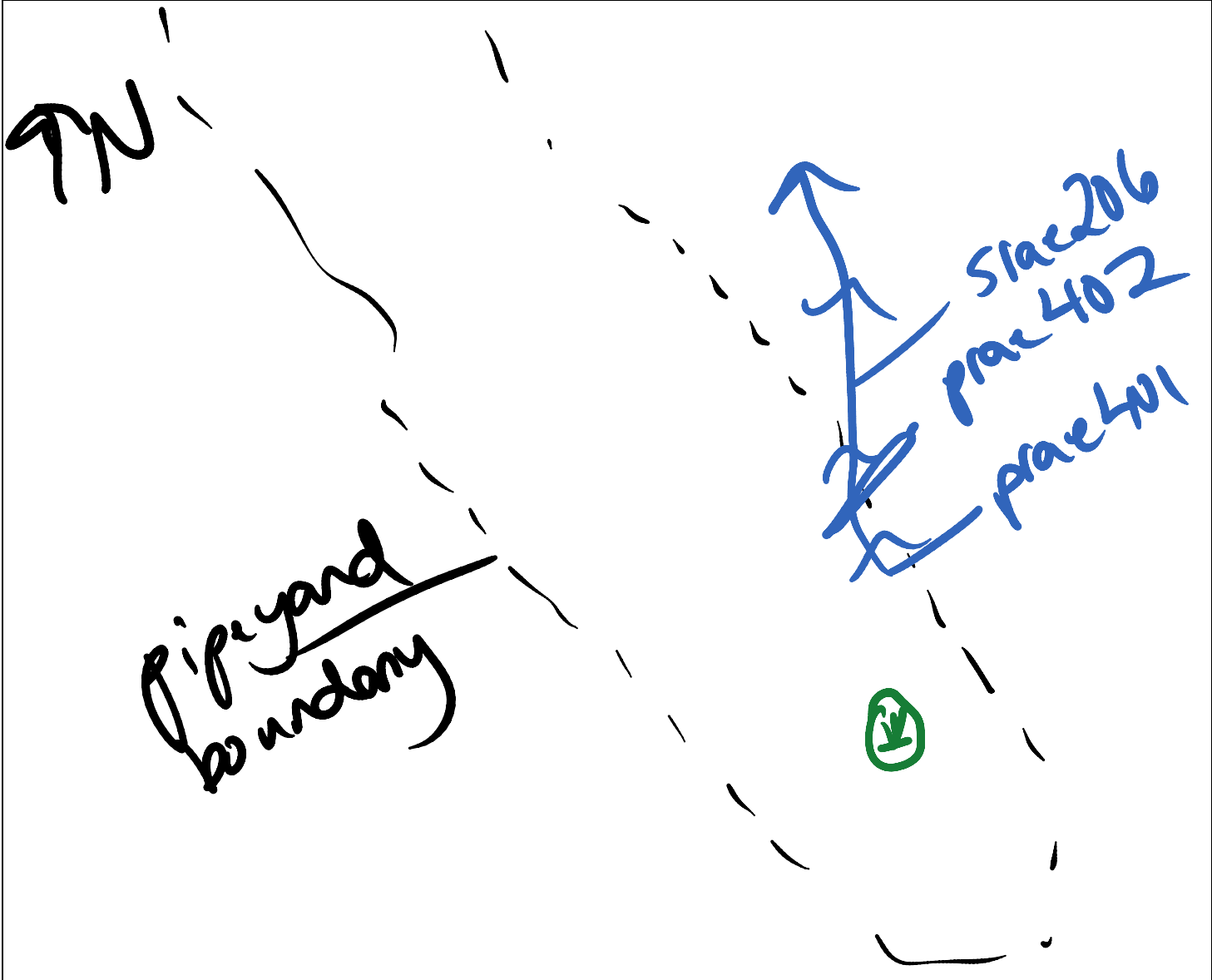
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Associated with seeps prae401 & 402

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





Waterbody srae206 facing south upstream



Waterbody srae206 facing north downstream



Waterbody srae206 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline	Waterbody Name: UNT to Falling Spring Run	Waterbody ID: SRAC159e	Date: 4/29/2016
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	Associated Wetland ID(s): None
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 checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial			
Waterbody Type: <small>(check one)</small> <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</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 type="checkbox"/> Water staining		
OHWM Height: <u>0.3</u> ft.	<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		
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>8</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>2</u> ft.	Depth of Water: <small>(Approx.)</small> N/A <input type="checkbox"/> <u>0.2</u> ft.
Sinuosity: <small>(check one)</small> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <small>(Approx.)</small> <u>1</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>2</u> ft. Left: <u>2</u> ft.	Bank slope Right: <u>60</u> degrees Left: <u>60</u> 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> % of Substrate: <u> </u> % <u> </u> % <u>10</u> % <u>45</u> % <u>35</u> % <u>10</u> % <u> </u> % <u> </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>8</u> in. <u>2</u> in.		
° Dominant Bank Vegetation <small>(list)</small> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): None			
Aquatic Organisms Observed <small>(list)</small> : None			
T&E Species Observed <small>(list)</small> : None			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Located within roadside ditch			
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:

SRAC159e

^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.

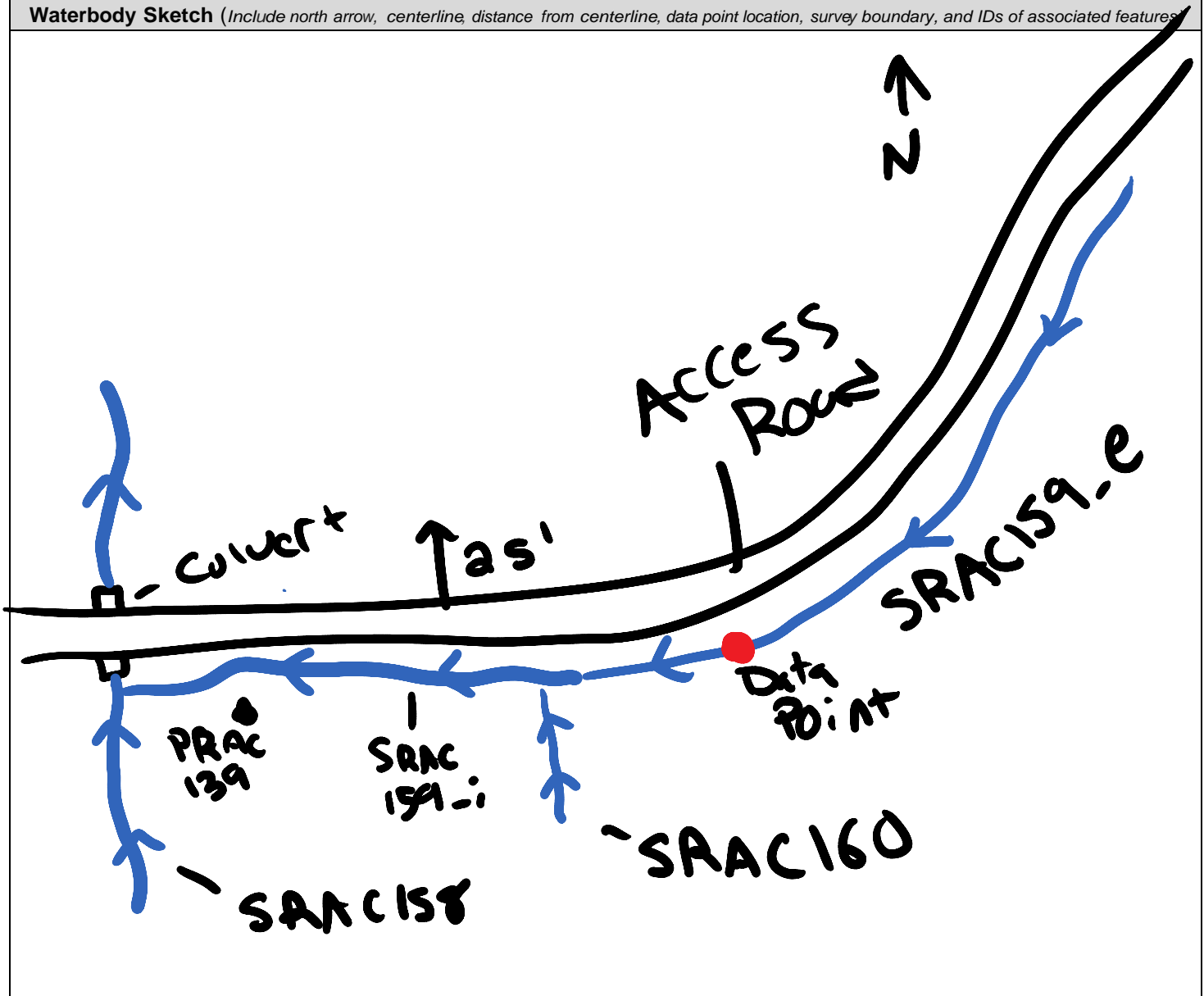
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

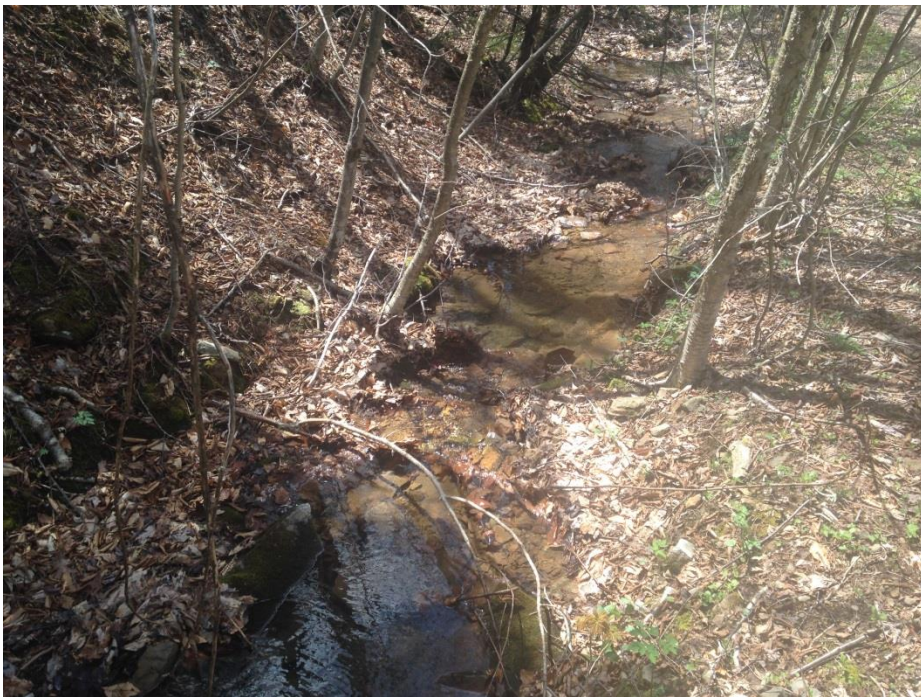
Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps

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





Waterbody SRAC159e facing east upstream



Waterbody SRAC159e facing west downstream



Waterbody SRAC159e facing south across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run		Waterbody ID: SRAC159i
Date: 4/29/2016				
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS	Photos: 3
Tract Number(s): 04-002-B025.AR		Nearest Milepost:		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 type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:				
OHWM Width: 4 ft.		OHWM Indicator: <i>(check all that apply)</i>		
OHWM Height: 0.3 ft.		<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 checked="" 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: 8 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1 ft.	Width of Waterbody - Water Edge to Water Edge: 4 ft.	Depth of Water: <i>(Approx.)</i> 0.2 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		Bank slope Right: 60 degrees Left: 60 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 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% 45% 35% 10% ___% ___%				
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> 8 in. 2 in.		
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac				
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): Located within roadside ditch				
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:

SRAC159i

^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.

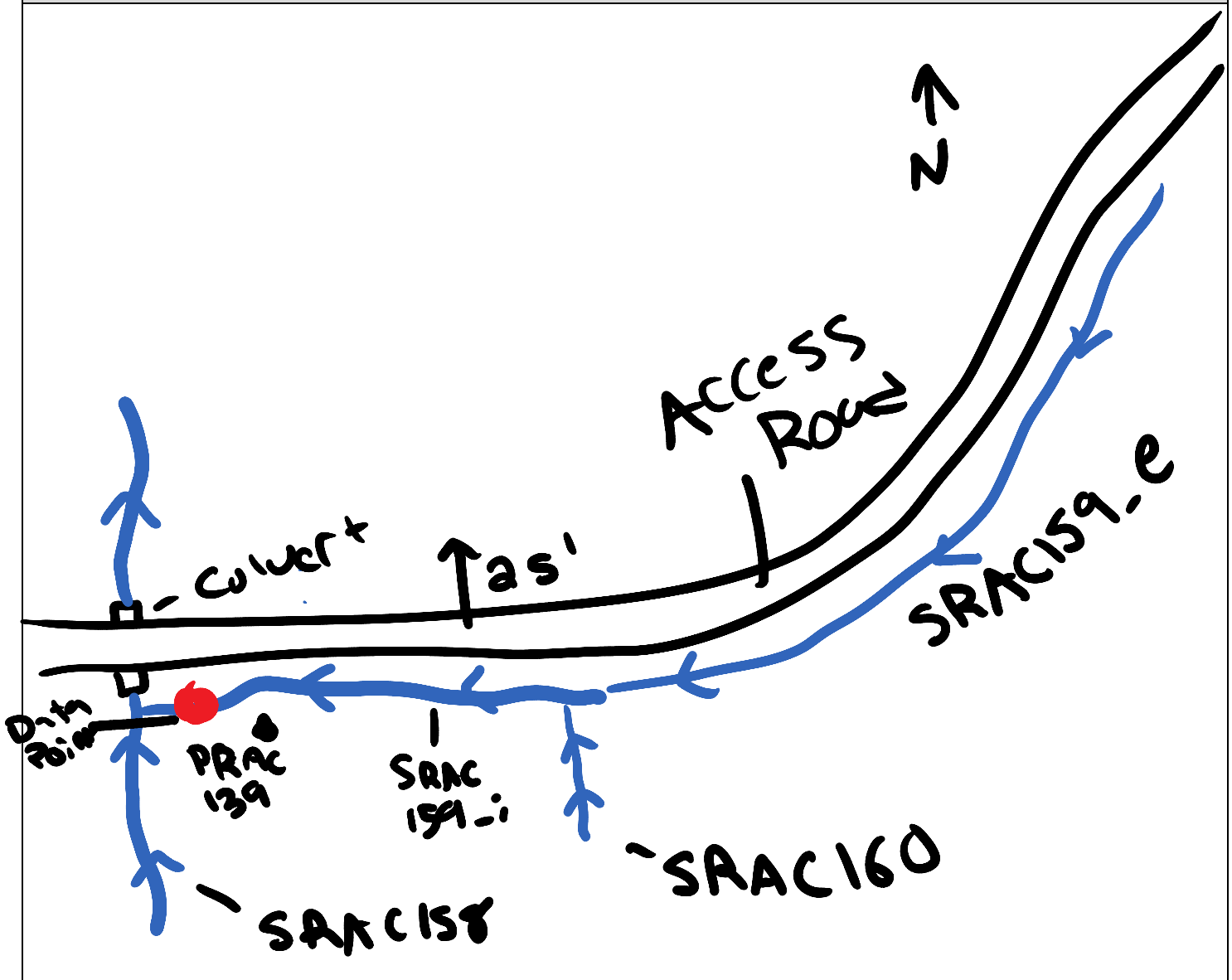
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps

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





Waterbody SRAC159i facing east upstream



Waterbody SRAC159i facing west downstream



Waterbody SRAC159i facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: SRAC159e		Date: 4/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 checked="" type="checkbox"/> Ephemeral <input 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: _ 2 _ ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: _ 0.3 _ 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 <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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: _ 8 _ 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"/> _ 0.2 _ ft.
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"/>	Bank height Right: _ 2 _ ft. Left: _ 2 _ ft.	Bank slope Right: _ 60 _ degrees Left: _ 60 _ 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 % _ 45 % _ 35 % _ 10 % _ % _ %			
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> _ 8 _ in. _ 2 _ in.			
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac			
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): Located within roadside ditch			
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:

SRAC159e

^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.

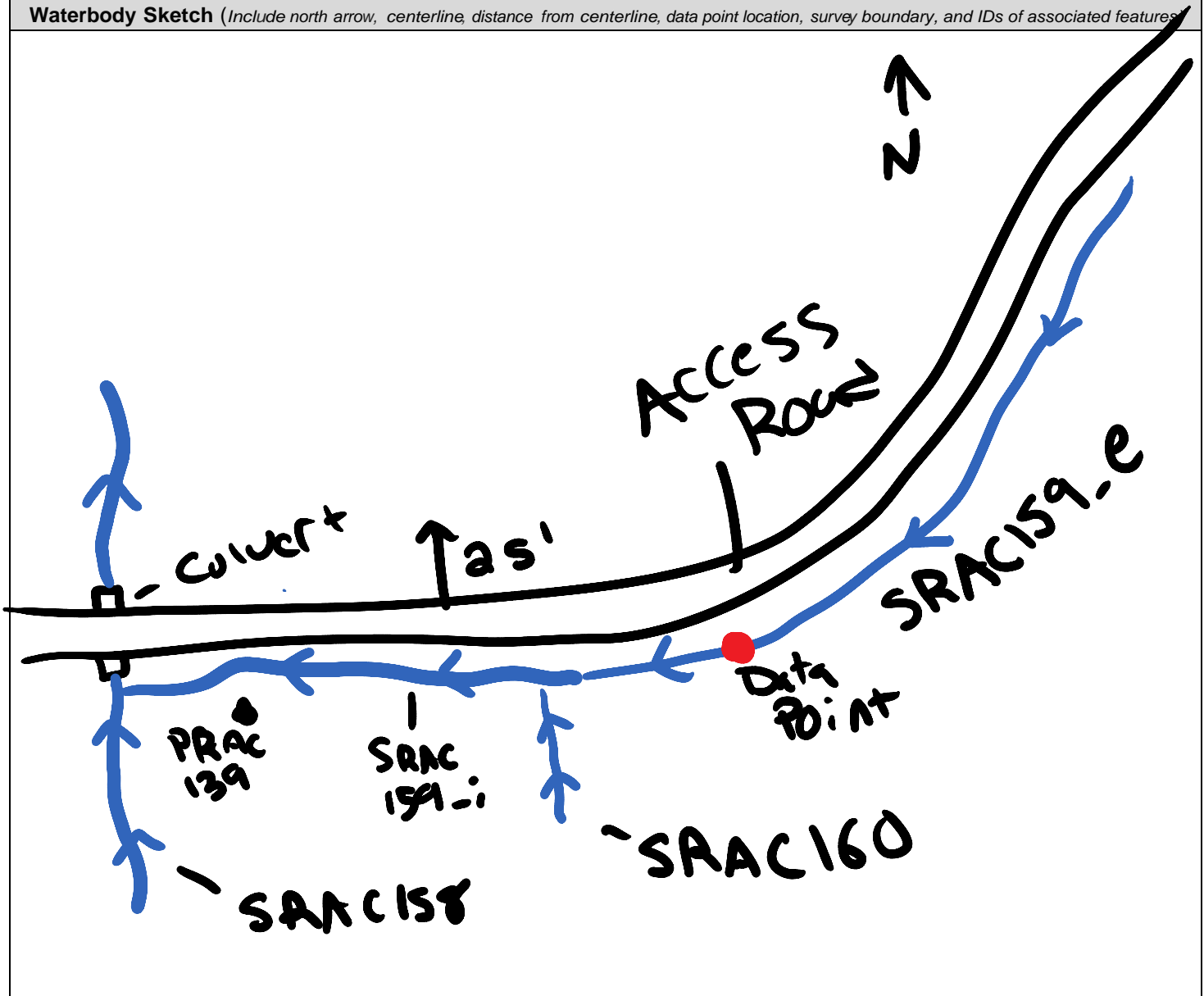
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

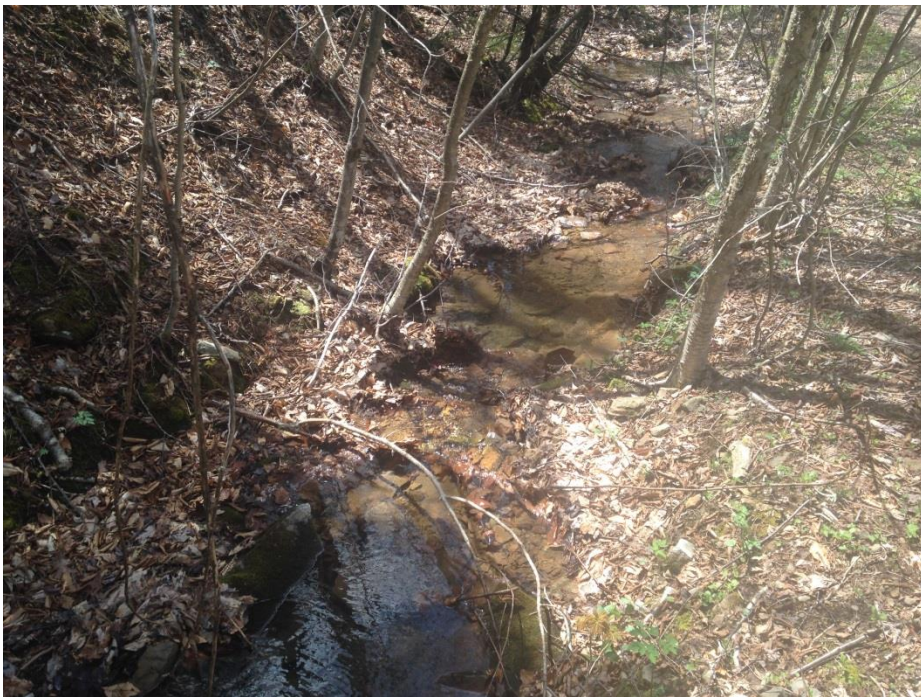
Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps

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





Waterbody SRAC159e facing east upstream



Waterbody SRAC159e facing west downstream



Waterbody SRAC159e facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: SRAC159i		Date: 4/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: <u>4</u> 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	
OHWM Height: <u>0.3</u> ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>8</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>1</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>4</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.2</u> ft.
Sinuosity: <i>(check one)</i> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>1</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>2</u> ft. Left: <u>2</u> ft.	Bank slope Right: <u>60</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> </u> % <u> </u> % <u>10</u> % <u>45</u> % <u>35</u> % <u>10</u> % <u> </u> % <u> </u> %			
Width of Riparian Zone: <u> </u> 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 checked="" type="checkbox"/>	Avg. DBH of Dominants: <i>(approx.)</i> <u>8</u> in. <u>2</u> in.		
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): <u>Leaf packs</u>			
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 within roadside ditch			
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:

SRAC159i

^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.

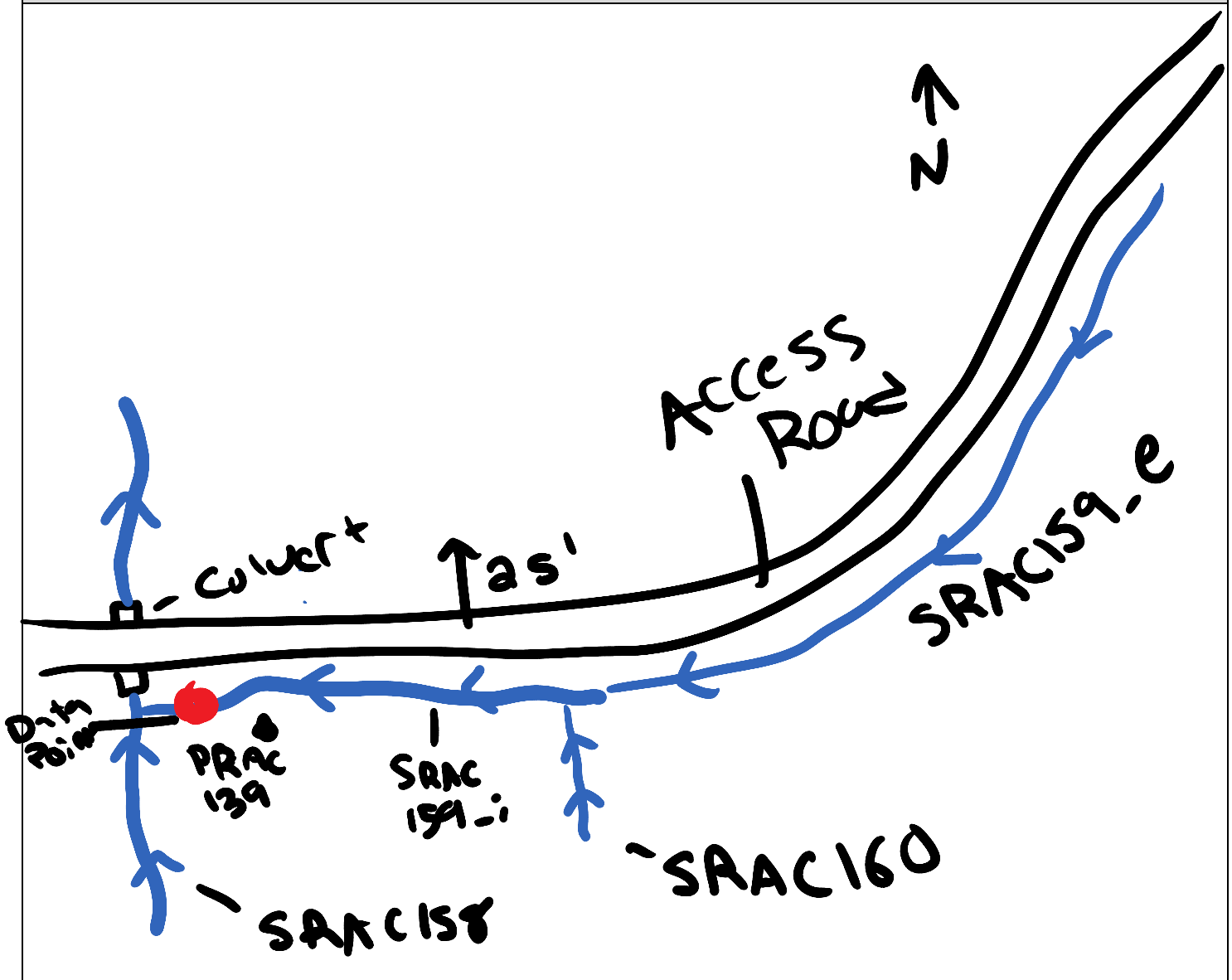
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps

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





Waterbody SRAC159i facing east upstream



Waterbody SRAC159i facing west downstream



Waterbody SRAC159i facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: SRAC158		Date: 4/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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: 6 ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: 0.5 ft.		<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	
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 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1 ft.	Width of Waterbody - Water Edge to Water Edge: 6 ft.	Depth of Water: <i>(Approx.)</i> 0.4 ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		Water velocity: <i>(Approx.)</i> 1 fps	Bank height: Right: 3 ft. Left: 3 ft.
N/A <input type="checkbox"/>		Bank slope: Right: 60 degrees Left: 60 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: ___% 20% 20% 45% 15% ___% ___% ___%			
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		
Avg. DBH of Dominants: <i>(approx.)</i> 10 in. 2 in.			
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac, indian plantain			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Leaf packs, rock piles			
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): Flows through a 2' diameter 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:

SRAC158

^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.

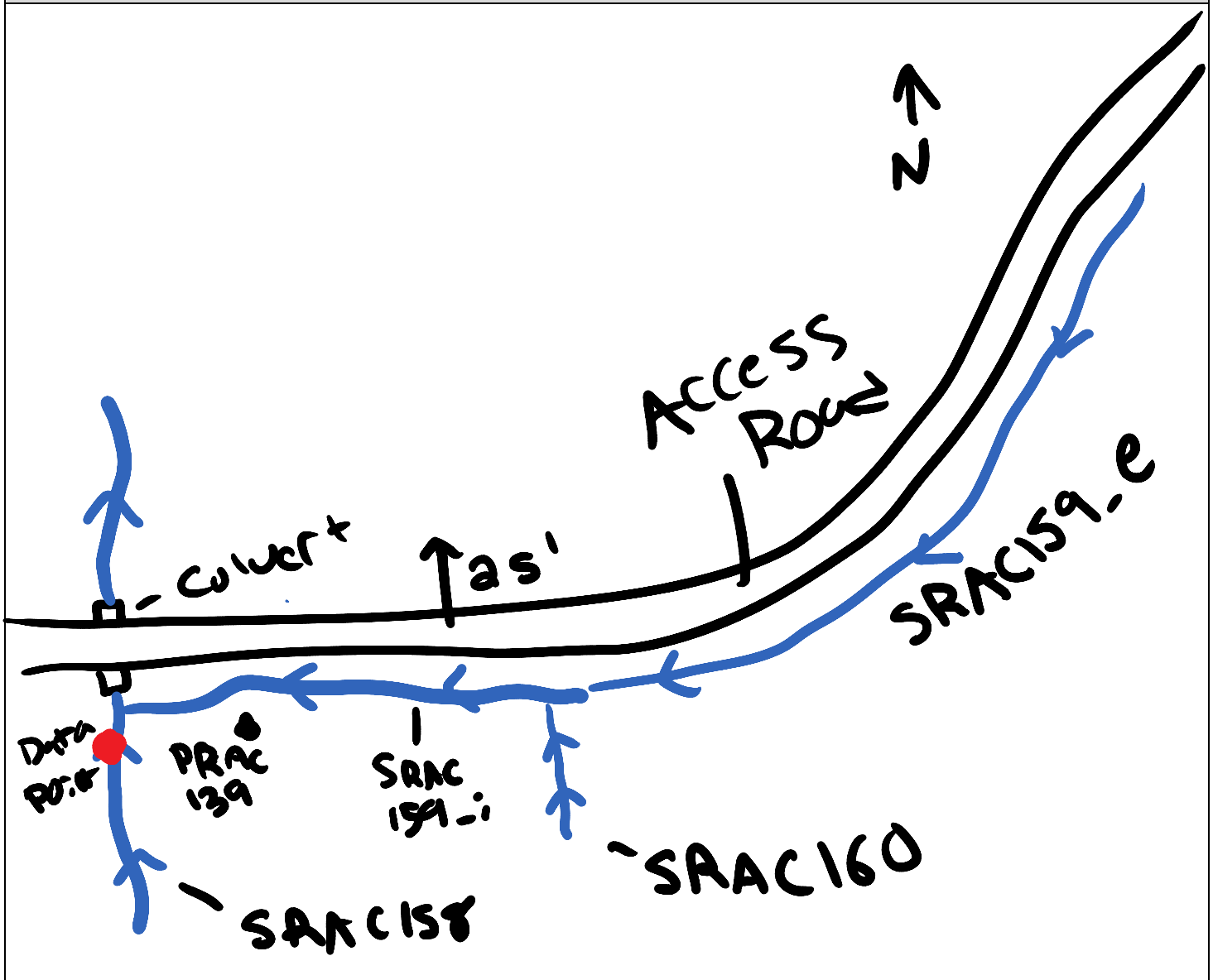
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago. Road is eroding away near culvert outlet.

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





Waterbody SRAC158 facing south upstream



Waterbody SRAC158 facing north downstream



Waterbody SRAC158 facing east across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run		Waterbody ID: SRAC157
				Date: 4/29/2016
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS	Photos: 3
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	Associated Wetland ID(s): None	
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 checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial				
Waterbody Type: <small>(check one)</small>				
<input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:				
OHWM Width: <u>3</u> ft.		OHWM Indicator: <small>(check all that apply)</small>		
Height: <u>0.3</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"/> Wreck 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>18</u> ft.		Width of Waterbody - Toe of Slope to Toe of Slope: <u>1</u> ft.		Depth of Water: <small>(Approx.)</small> <u>0.2</u> ft.
		Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>3</u> ft.		N/A <input type="checkbox"/>
Sinuosity: <small>(check one)</small>		Water velocity: <small>(Approx.)</small>		Bank height
<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		<u>1</u> fps N/A <input type="checkbox"/>		Right: <u>2</u> ft. Left: <u>2</u> ft.
				Bank slope Right: <u>60</u> degrees Left: <u>60</u> 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 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>45</u> % <u>45</u> % <u>10</u> % _____% _____%				
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> <u>8</u> in. <u>2</u> in.		
° Dominant Bank Vegetation <small>(list)</small> :				
Locust, black cherry, yellow birch, golden ragwort, red maple, dandelion, old field cinquefoil, Canadian goldenrod, blackberry				
Aquatic Habitats <small>(ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools)</small> :				
None				
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> :				
Located within roadside ditch flows across access 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:

SRAC157

^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.

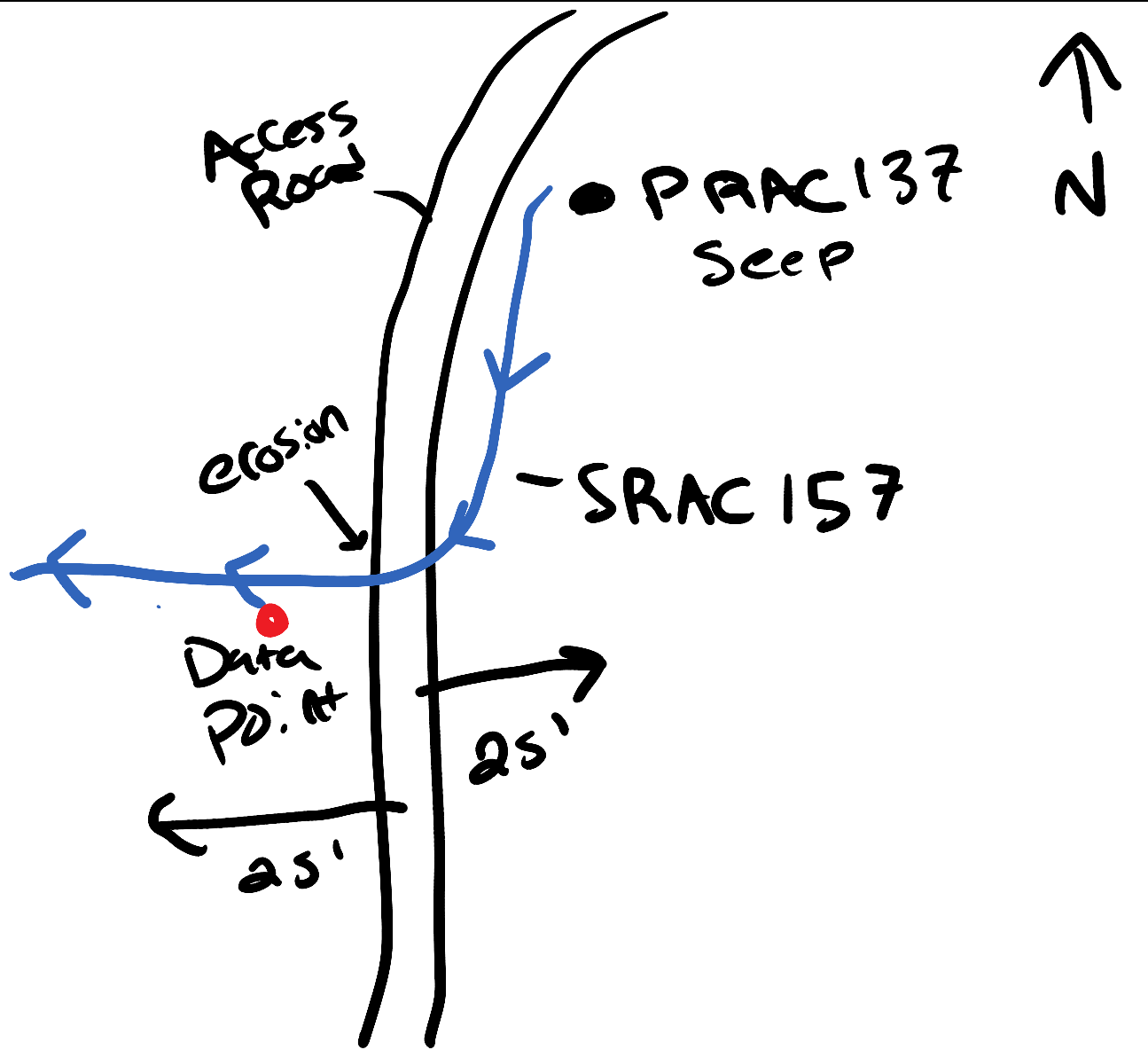
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps. Stream crosses access road and due to erosion it has begun to erode the road

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





Waterbody SRAC157 facing east upstream



Waterbody SRAC157 facing west downstream



Waterbody SRAC157 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: SRAC156		Date: 4/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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: 6 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	
OHWM Height: 0.5 ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 15 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 1 ft.	Width of Waterbody - Water Edge to Water Edge: 6 ft.	Depth of Water: <i>(Approx.)</i> 0.4 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 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 3 ft. Left: 3 ft.		Bank slope Right: 60 degrees Left: 60 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 type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: ___% 20% 20% 45% 15% ___% ___%			
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> 10 in. 2 in.	
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac, indian plantain			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Leaf packs, rock piles			
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): Flows through a 2' diameter 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:

SRAC156

^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.

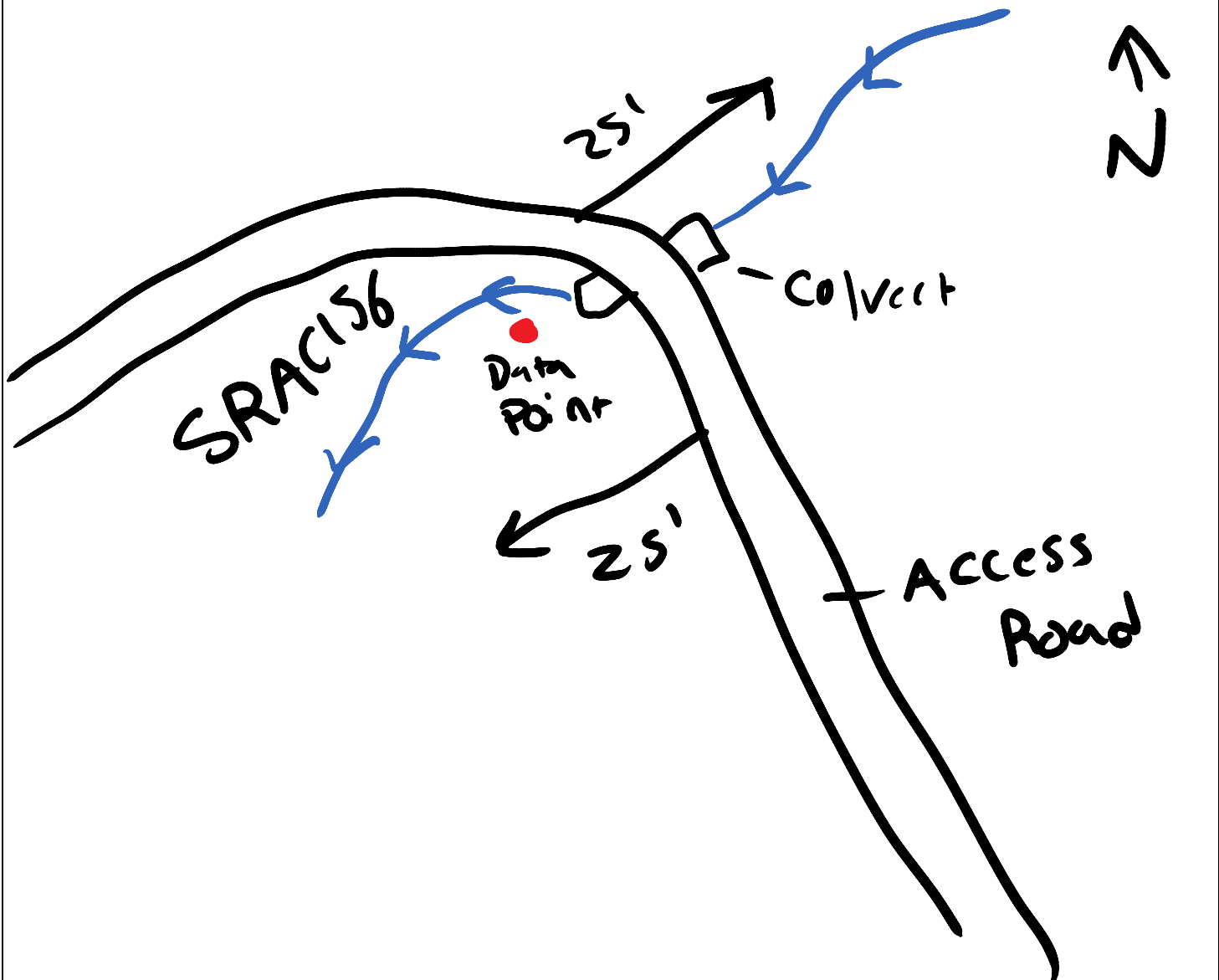
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago.

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





Waterbody SRAC156 facing northeast upstream



Waterbody SRAC156 facing southwest downstream



Waterbody SRAC156 facing northwest across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: Sray001		Date: 08/17/16	
State: West Virginia	County: Randolph	Company: Dominion	Crew Member Initials: KO, CG, AS
Photos: 1-3			
Tract Number(s): 04-002-B025		Nearest Milepost: N/A	Associated Wetland ID(s): N/A
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 checked="" type="checkbox"/> Ephemeral <input 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>	
Height: _2_ 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 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_ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _3_ 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 checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> _____ fps N/A <input checked="" type="checkbox"/>	Bank height Right: _1.5_ ft. Left: _1.5_ ft.	Bank slope Right: _75_ degrees Left: _75_ 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: _____% <u>5</u> % <u>55</u> % <u>10</u> % _____% <u>30</u> % _____% _____%			
Width of Riparian Zone: N/A <input checked="" type="checkbox"/> _____ 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		
	Avg. DBH of Dominants: <i>(approx.)</i> <u>8</u> in. <u>1</u> in.		
Dominant Bank Vegetation <i>(list)</i> : Tulip Poplar, Yellow Birch, Green Ash, Wood Nettle, Lilly Sege, Wild Ginger, Wood Ferns			
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): none			
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 type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low			

Waterbody ID:

Sray001

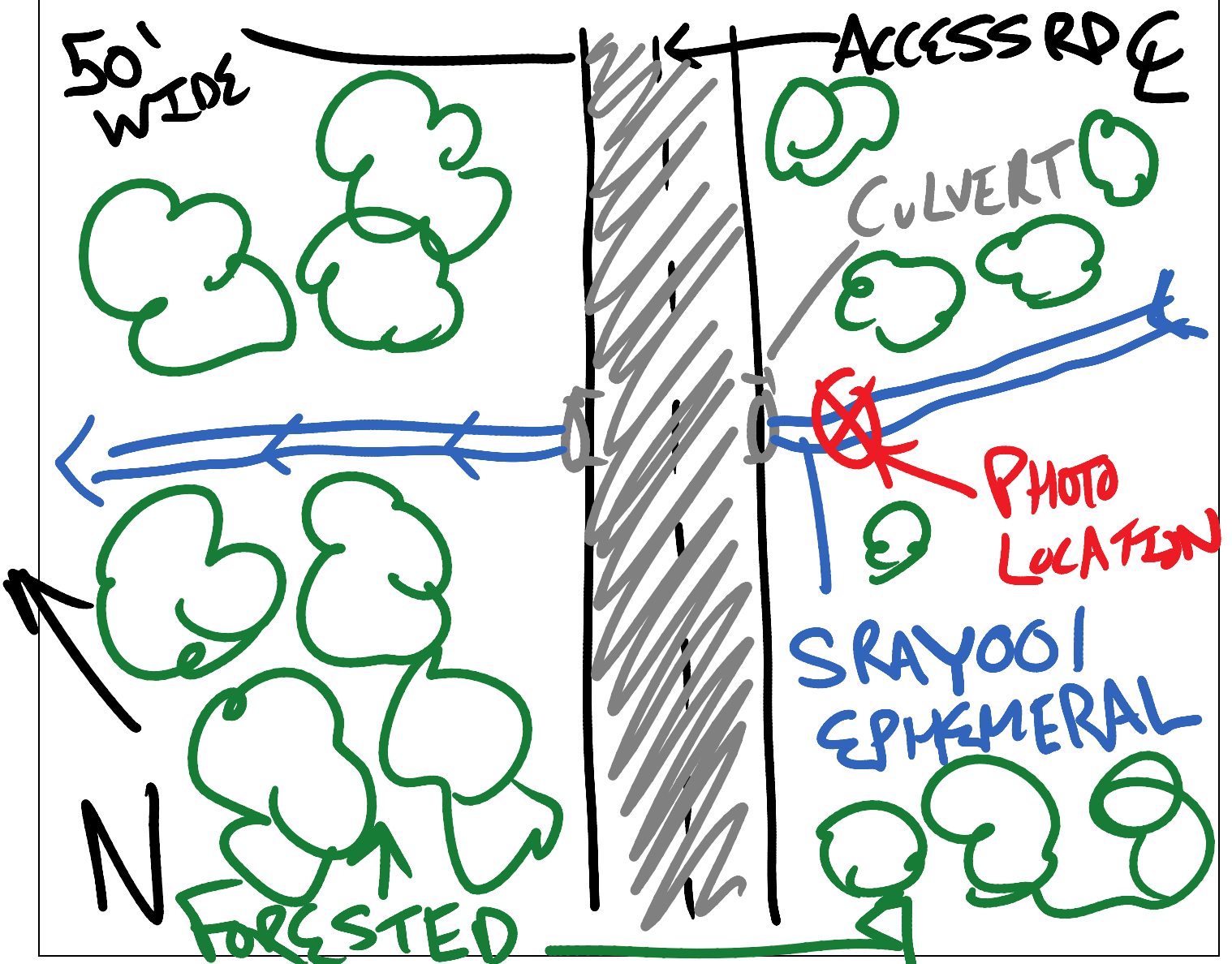
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 sray001 facing southeast upstream



Waterbody sray001 facing northwest downstream



Waterbody sray001 facing northeast across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: Srac133		Date: 4/26/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 checked="" type="checkbox"/> Ephemeral <input 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_ ft.		OHWM Indicator: <i>(check all that apply)</i>	
Height: _0.4_ 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_ 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"/> _3_ ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> _0.2_ 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: _60_ 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: ___% ___% _15_% _45_% _20_% _20_% _____% _____%			
Width of Riparian Zone: _80_ ft. N/A <input 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> _12_in. _2_in.			
° Dominant Bank Vegetation <i>(list)</i> : Yellow birch, black cherry, red maple, violets, ramps, false helborne			
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): Stream is located within a roadside ditch an flows under the access road through a 18" culvert			
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:

SRAC133

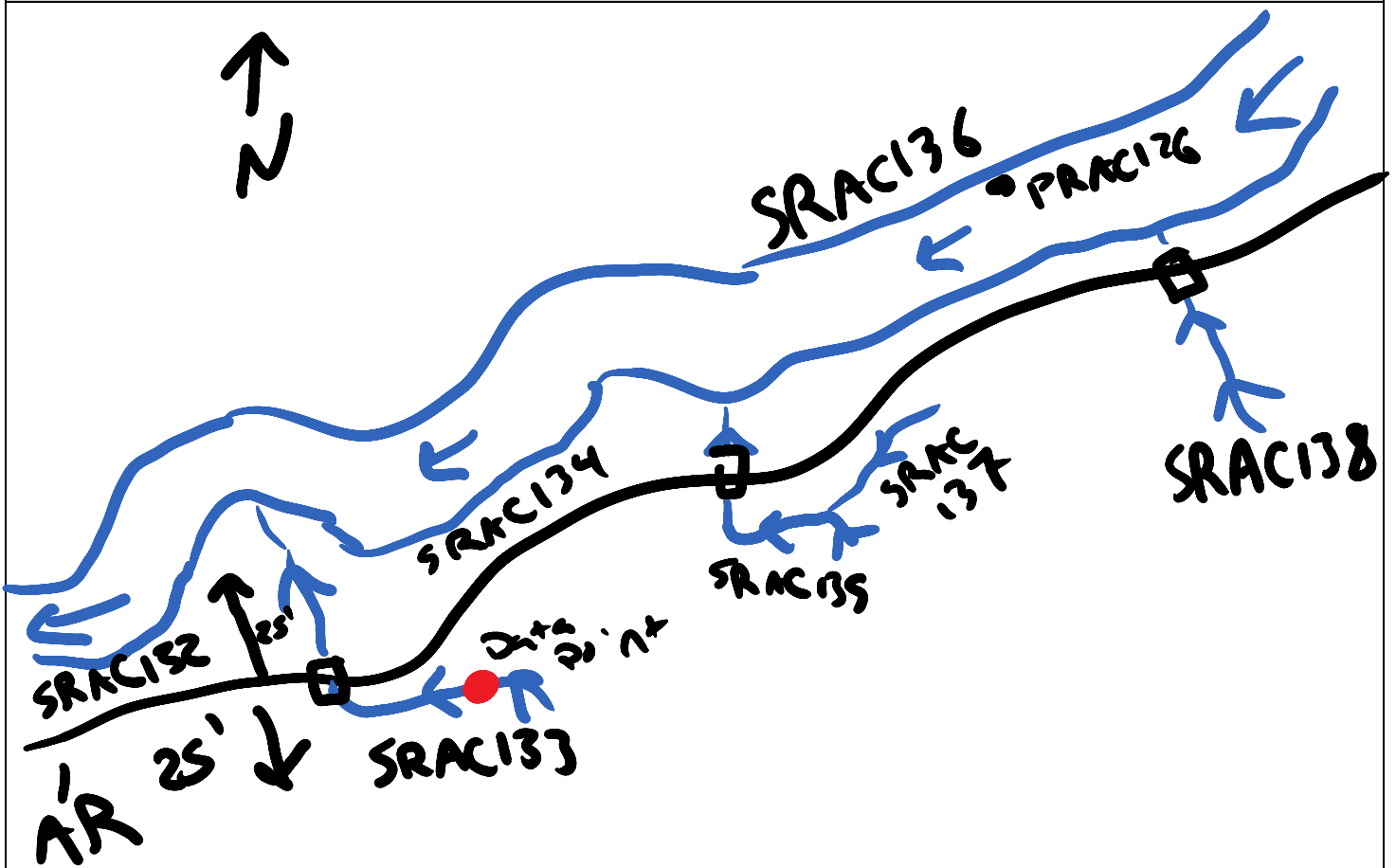
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAC133 facing east upstream



Waterbody SRAC133 facing west downstream



Waterbody SRAC133 facing south across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Falling Spring Run	
Waterbody ID: Sracs134		Date: 4/26/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 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>20</u> 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	
OHWM Height: <u>1.5</u> ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>35</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>10</u> ft.	Width of Waterbody - Water Edge to Water Edge: <u>23</u> ft.	Depth of Water: <i>(Approx.)</i> <u>0.8</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</u> fps	Bank height: Right: <u>5</u> ft. Left: <u>7</u> ft.
N/A <input type="checkbox"/>		Bank slope: Right: <u>60</u> degrees Left: <u>70</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 checked="" type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: <u>5</u> % <u>30</u> % <u>20</u> % <u>35</u> % <u>10</u> % _____ % _____ % _____ %			
Width of Riparian Zone: <u>80</u> 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> <u>12</u> in. <u>2</u> in.	
° Dominant Bank Vegetation <i>(list)</i> : Yellow birch, black cherry, red maple, violets, ramps			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Rock piles, riffles/pools, overhanging roots/bank			
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 ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SRAC134

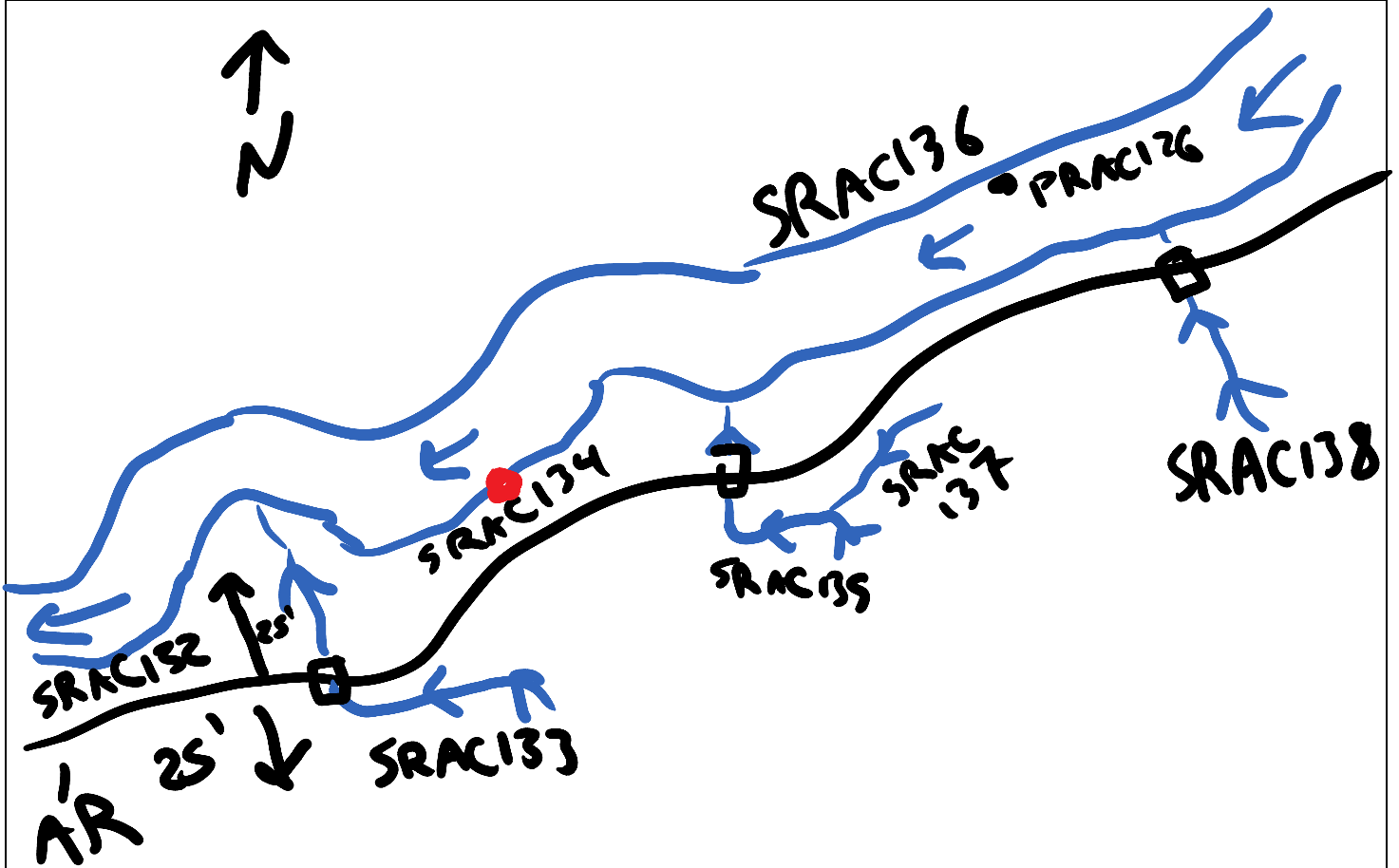
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAC134 facing east upstream



Waterbody SRAC134 facing west downstream



Waterbody SRAC134 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: Falling Spring Run	
Waterbody ID: Srac136		Date: 4/26/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 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</u> 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: <u>1</u> ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: <u>25</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>4</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>12</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>6</u> ft. Left: <u>4</u> ft.	Bank slope Right: <u>60</u> degrees Left: <u>70</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 checked="" type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: <u>70</u> % <u>10</u> % <u>20</u> % <u> </u> % <u> </u> % <u> </u> % <u> </u> % <u> </u> %			
Width of Riparian Zone: <u>20</u> 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> <u>6</u> in. <u>2</u> in.		
° Dominant Bank Vegetation <i>(list)</i> : Yellow birch, eastern hemlock, blackberry, black cherry, American elm, red maple, violets, ramps			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Rock piles, riffles/pools, overhanging roots/bank			
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 ³ : <i>(check one)</i> <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low			

Waterbody ID:

SRAC136

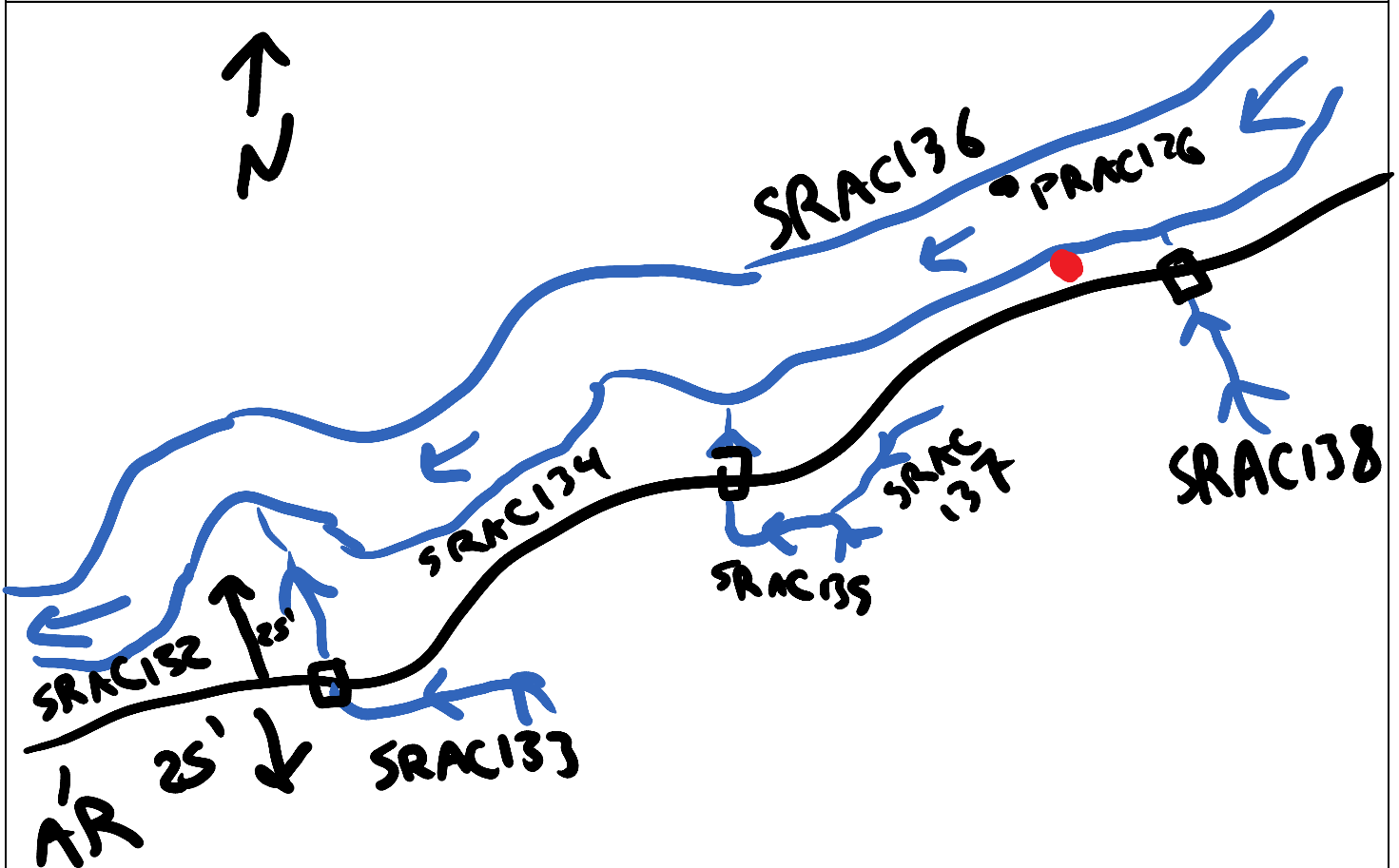
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance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

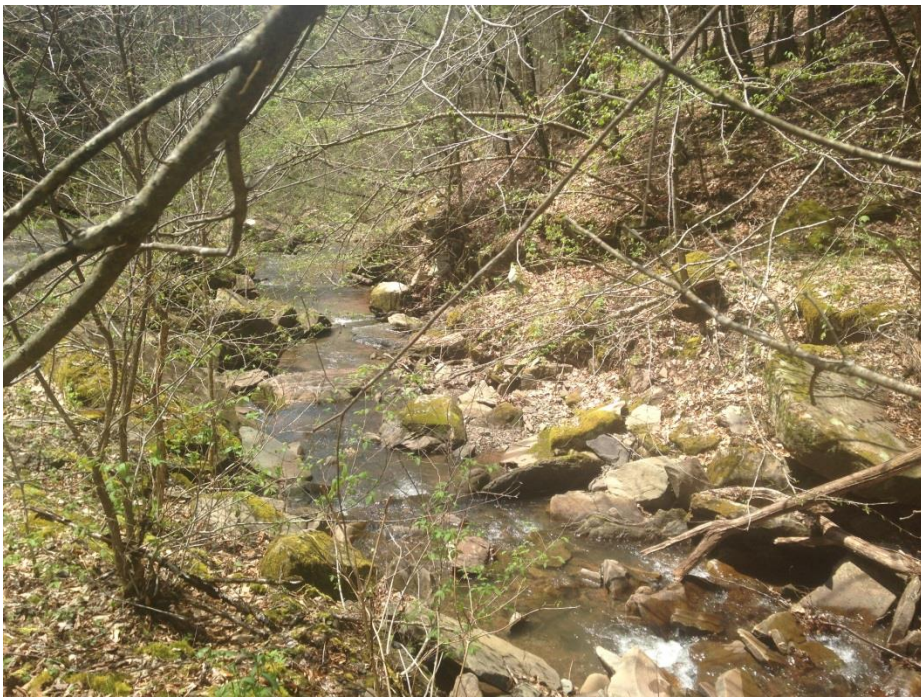
Notes:

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





Waterbody SRAC136 facing east upstream



Waterbody SRAC136 facing west downstream



Waterbody SRAC136 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: SRAC155		Date: 4/29/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 checked="" type="checkbox"/> Ephemeral <input 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: _ 3 _ 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 type="checkbox"/> Scouring <input type="checkbox"/> Water staining	
Height: _ 0.3 _ ft.		<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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: _ 6 _ 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"/> _ 3 _ ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> _ 0.2 _ ft.
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"/>	Bank height Right: _ 2 _ ft. Left: _ 2 _ ft.	Bank slope Right: _ 60 _ degrees Left: _ 60 _ 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 _ % _ 45 _ % _ 35 _ % _ 10 _ % _ % _ %			
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> _ 8 _ in. _ 2 _ in.			
° Dominant Bank Vegetation <i>(list)</i> : Tulip poplar, American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow, sumac			
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): Located within roadside ditch flows through an 18" culvert			
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:

SRAC155

^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.

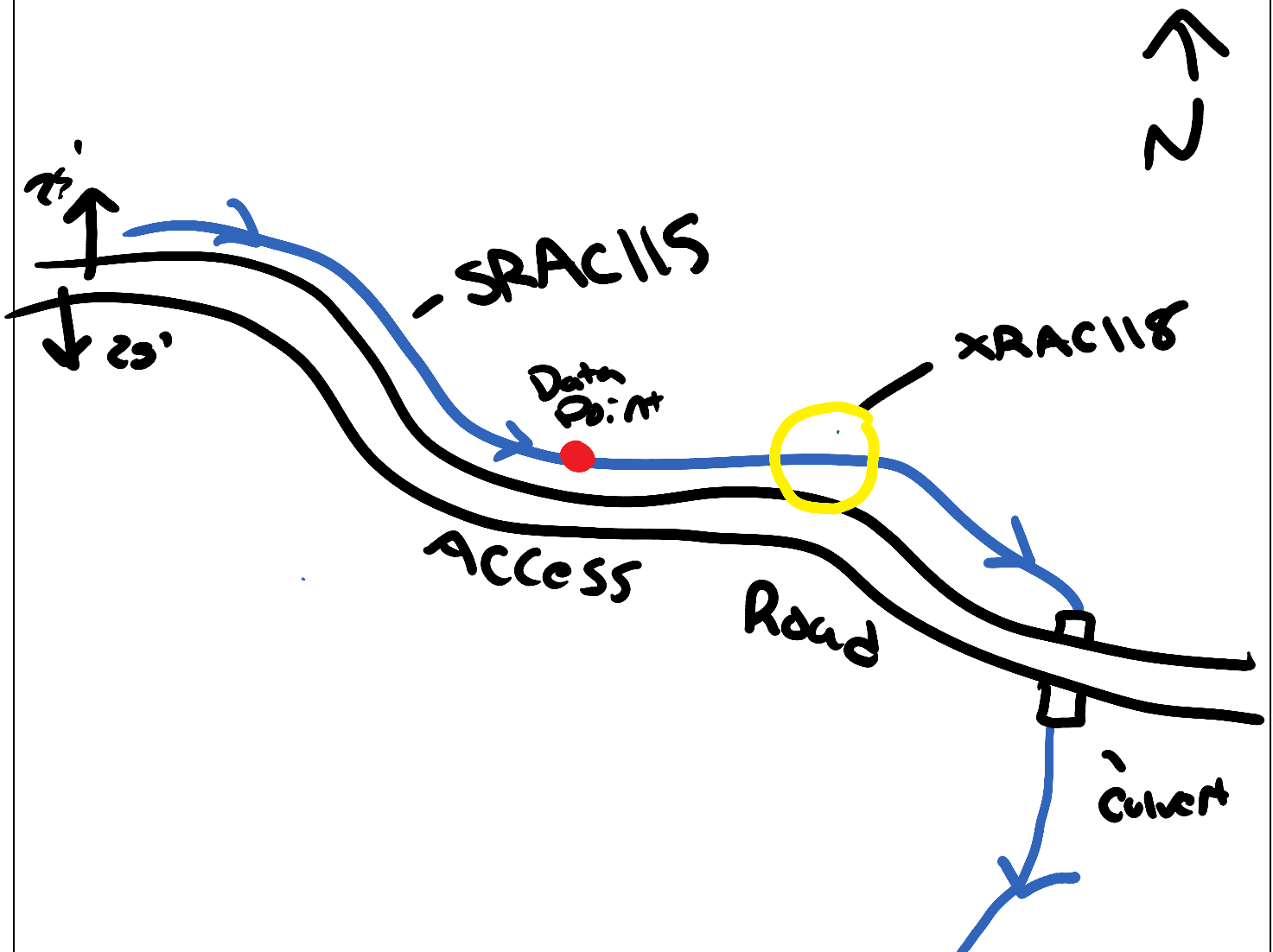
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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:

Recent heavy rain ending a few hours ago. Stream located with a roadside ditch and it receives water input from seeps

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





Waterbody SRAC155 facing west upstream



Waterbody SRAC155 facing east downstream



Waterbody SRAC155 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: Srae175		Date: 6/8/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CG, KO
Photos: 1-5			
Tract Number(s): 04-002-B025		Nearest Milepost: NA	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 type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Canal <input type="checkbox"/> Other:			
OHWM Width: 2 ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: 0.4 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 <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 checked="" type="checkbox"/> Soil characteristic change	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: 4 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> 0.1 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> 0.2 fps	
N/A <input type="checkbox"/>		N/A <input type="checkbox"/>	
Bank height Right: 2 ft. Left: 1 ft.		Bank slope Right: 45 degrees Left: 30 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: _____% _____% 5% 15% 40% 40% _____% _____%			
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> 5 in. 1 in.	
Dominant Bank Vegetation <i>(list)</i> : Ninebark, ash, violet, clover, birch, grasses			
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> : Invertebrates, caddis fly larvae			
T&E Species Observed <i>(list)</i> : none			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Roadside ditch			
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:

Srae175

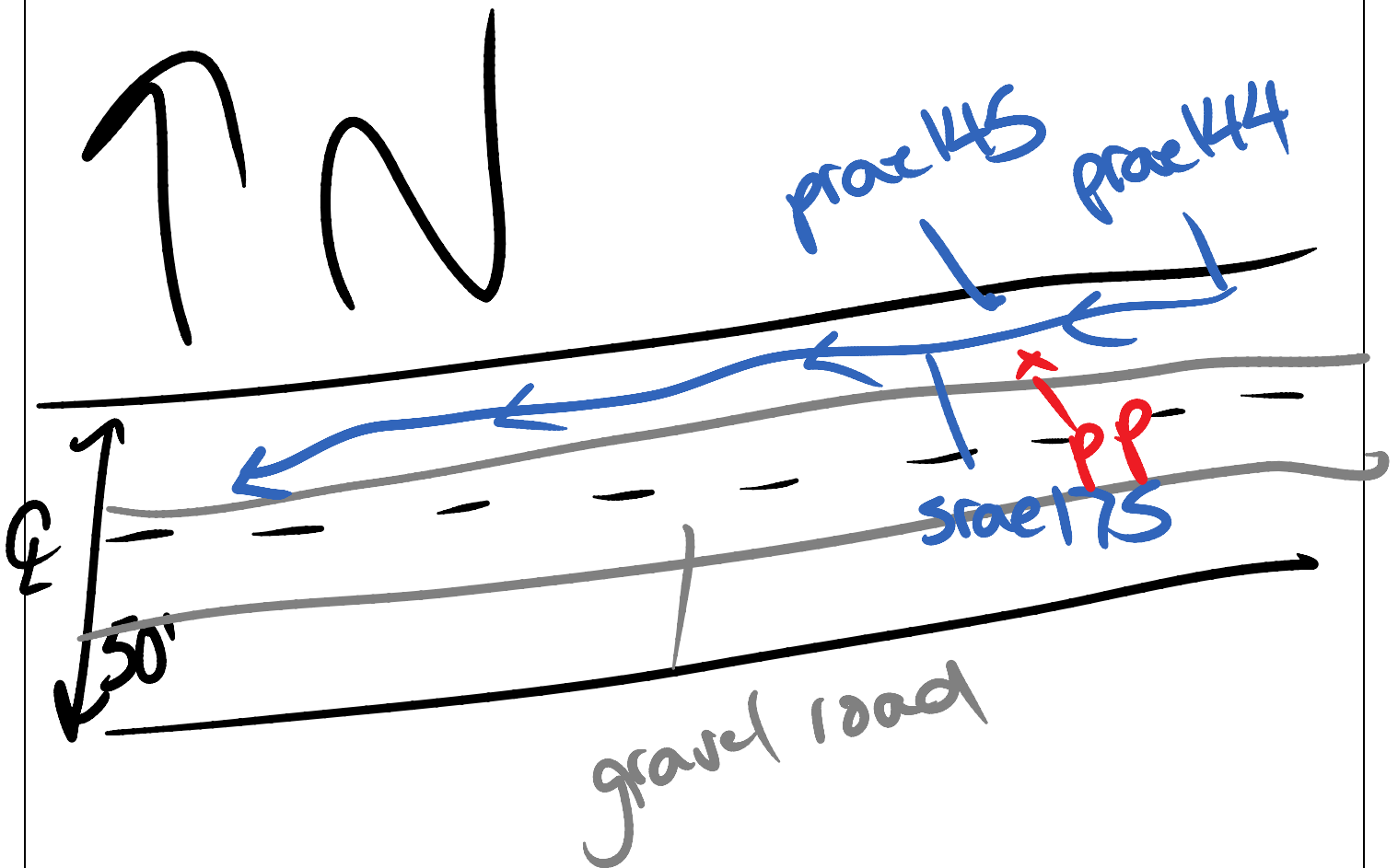
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAE175 facing east upstream



Waterbody SRAE175 facing west downstream



Waterbody SRAE175 facing north across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: Sracc138		Date: 4/26/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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 _ 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 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	
N/A <input type="checkbox"/>			
Width of Waterbody - Top of Bank to Top of Bank: _ 15 _ ft.	Width of Waterbody - Toe of Slope to Toe of Slope: _ 2 _ ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> _ 8 _ ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> _ 0.2 _ 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: _ 2 _ ft. Left: _ 4 _ ft.	Bank slope Right: _ 60 _ 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 checked="" type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <input type="checkbox"/> Other:			
% of Substrate: _ 5 % _ 30 % _ 20 % _ 35 % _ 10 % _____ % _____ % _____ %			
Width of Riparian Zone: _ 30 _ ft. N/A <input 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> _ 12 _ in. _ 2 _ in.			
° Dominant Bank Vegetation <i>(list)</i> : Yellow birch, black cherry, red maple, violets, ramps, American elm, easter hemlock, saxifrage, Christmas fern, trillium			
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): Flows through 3' culvert under access road			
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:

SRAC138

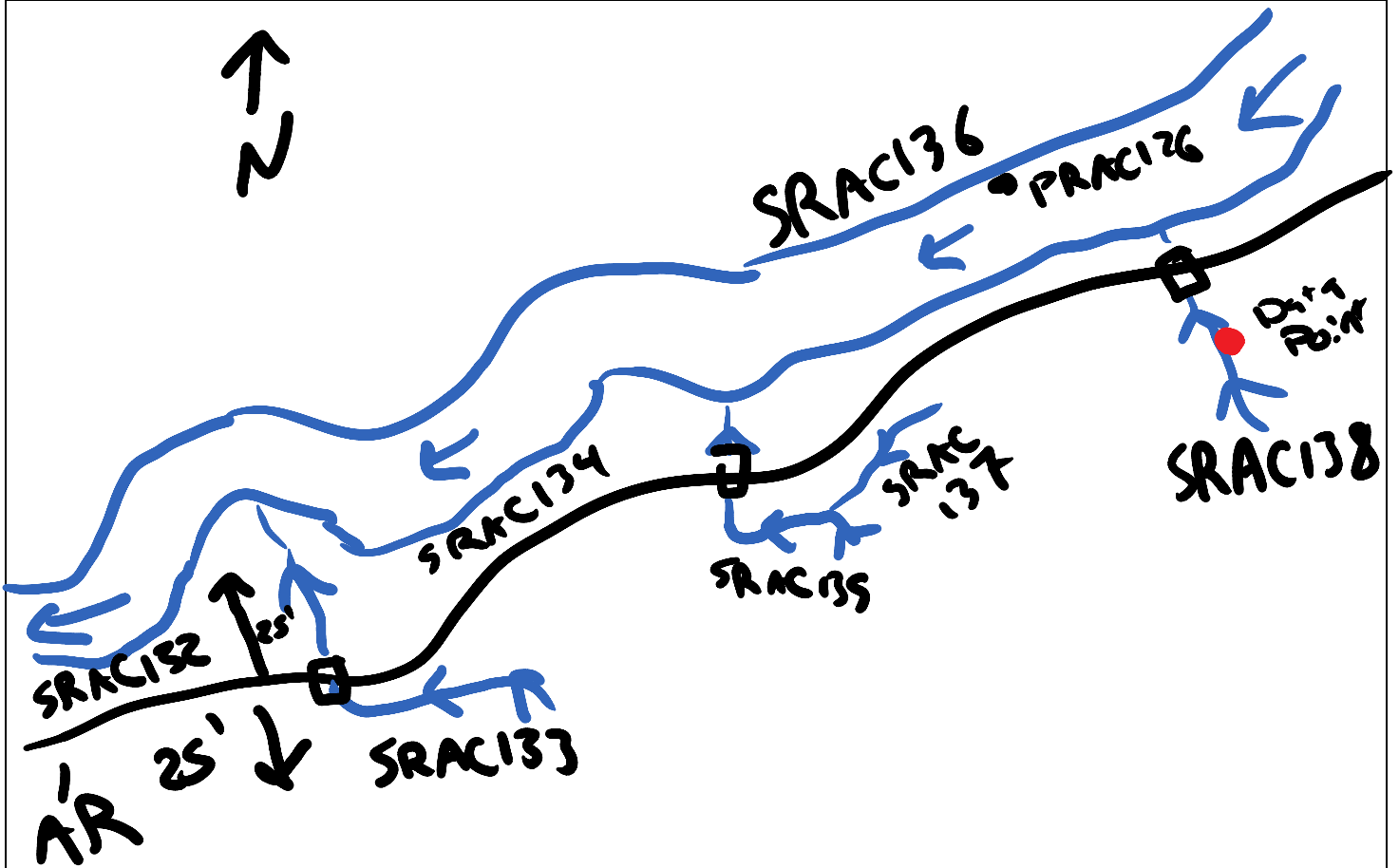
^a **High Quality:** Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance 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 SRAC138 facing south upstream



Waterbody SRAC138 facing north downstream



Waterbody SRAC138 facing east across

Linear Waterbody Data Sheet

Survey Description			
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Falling Spring Run	
Waterbody ID: Sracc139		Date: 4/28/2016	
State: West Virginia	County: Randolph	Company: NRG	Crew Member Initials: CR, AS
Photos: 3			
Tract Number(s): 04-002-B025.AR		Nearest Milepost:	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: <u>10</u> ft.		OHWM Indicator: <i>(check all that apply)</i>	
OHWM Height: <u>0.6</u> ft.		<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	
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>15</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>2</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A <input type="checkbox"/> <u>10</u> ft.	Depth of Water: <i>(Approx.)</i> N/A <input type="checkbox"/> <u>0.6</u> ft.
Sinuosity: <i>(check one)</i> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering	Water velocity: <i>(Approx.)</i> <u>2</u> fps N/A <input type="checkbox"/>	Bank height Right: <u>4</u> ft. Left: <u>2</u> ft.	Bank slope Right: <u>60</u> degrees Left: <u>70</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> </u> % <u> 5 </u> % <u> 20 </u> % <u> 65 </u> % <u> 10 </u> % <u> </u> % <u> </u> % <u> </u> %			
Width of Riparian Zone: <u>50</u> 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> <u> 12 </u> in. <u> 2 </u> in.		
° Dominant Bank Vegetation <i>(list)</i> : American elm, red maple, locust, yellow birch, beech, May-apple, goldenrod, blackberry, dandelion, yarrow			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): <u>Rock piles, riffles, leaf packs</u>			
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): Flows through 4' culvert under access road			
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:

SRAC139

^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.

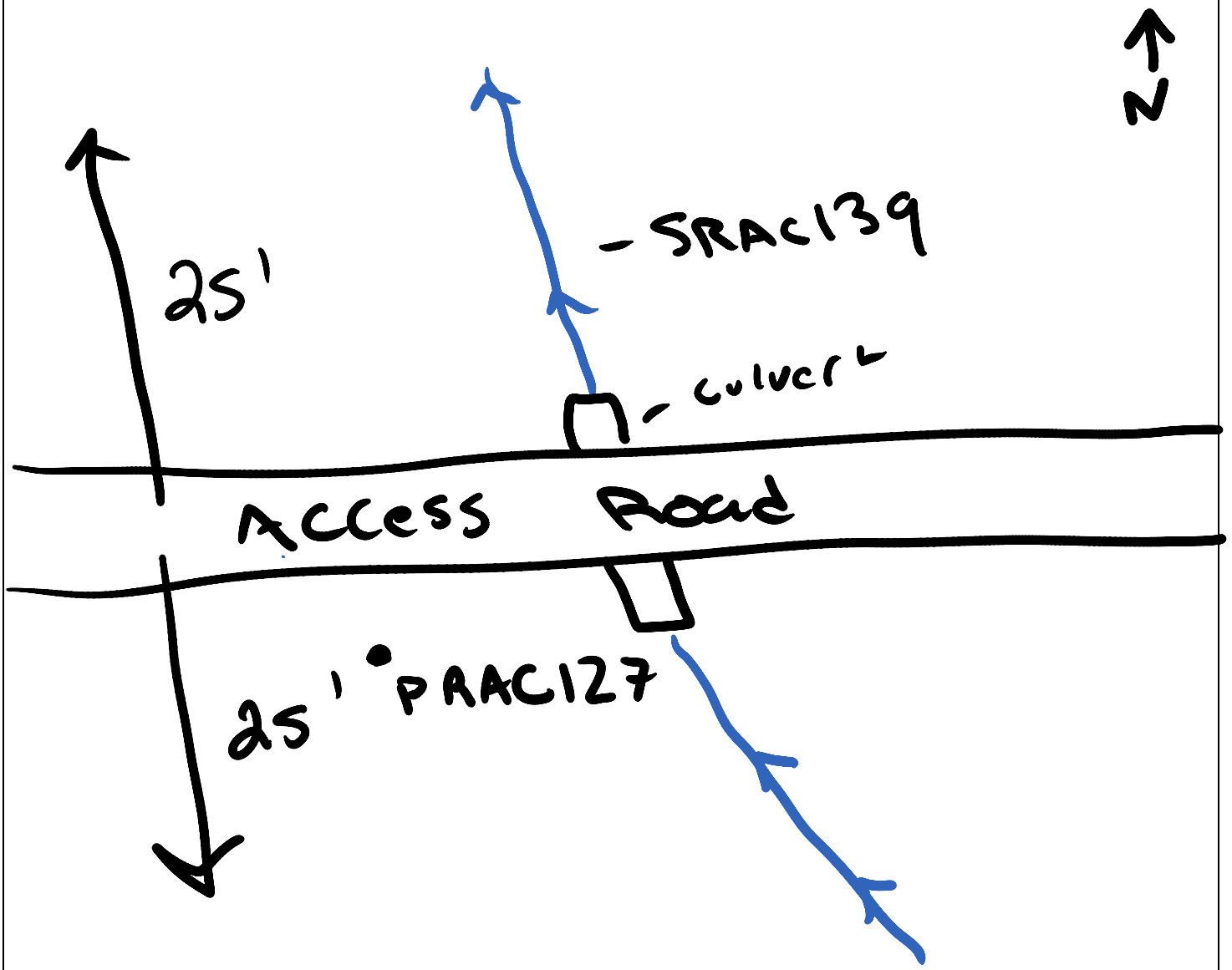
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate 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 at the OHWM. Recent heavy rain ending a few hours ago

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





Waterbody SRAC139 facing southeast upstream



Waterbody SRAC139 facing northwest downstream



Waterbody SRAC139 facing northeast across