

Linear Waterbody Data Sheet

Survey Description					
Project Name: Southeast Reliability		Waterbody Name: SAYLERS CREEK		Waterbody ID: SNOK001	Date: 7/24/2014
State: Virginia	County: Nottoway	Company: W&C	Crew Member Initials: JS, WM	Photos: 100-0213 TO 0215	
Tract Number(s): 12-001/002		Nearest Milepost: 222		Associated Wetland ID(s): NA	
Survey Type: <i>(check one)</i> ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:					
Physical Attributes					
Stream Classification: <i>(check one)</i> ☐ Ephemeral ☐ Intermittent ☒ Perennial					
Waterbody Type: <i>(check one)</i> ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:					
OHWM Width: <u>10</u> ft. Height: <u>2</u> ft. N/A ☐		OHWM Indicator: <i>(check all that apply)</i> ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining ☒ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change			
Width of Waterbody - Top of Bank to Top of Bank: <u>14</u> ft.		Width of Waterbody - Toe of Slope to Toe of Slope: <u>10</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>7</u> ft.	
Sinuosity: <i>(check one)</i> ☐ Straight ☒ Meandering		Water velocity: <i>(Approx.)</i> <u>0.3</u> fps N/A ☐		Bank height Right: <u>4</u> ft. Left: <u>4</u> ft.	
				Bank slope Right: <u>70</u> degrees Left: <u>80</u> degrees	
Qualitative Attributes					
Water Appearance: <i>(check one)</i> ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:					
Substrate: <i>(check all that apply)</i> ☐ Bedrock ☒ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:					
% of Substrate: <u>NA</u> % <u>5</u> % <u>10</u> % <u>20</u> % <u>60</u> % <u>5</u> % <u>NA</u> % <u>NA</u> %					
Width of Riparian Zone: <u>>100</u> ft. N/A ☐		Vegetative Layers: <i>(check all that apply)</i> ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs Avg. DBH of Dominants: <i>(approx.)</i> <u>12</u> in. <u>3</u> in.			
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, DOGWOOD, WHITE OAK, AZALEA, CHASMANTHIUM, IRONWOOD					
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): UNDERCUT BANKS, RIFFLE/POOL COMPLEX, BOULDERS, SOFT SANDY SEDIMENT, CWD, OVERHANGING VEG					
Aquatic Organisms Observed (list): FISH, FROGS, HELLGRAMITES, EPT					
T&E Species Observed (list): NA					
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): LOGGING IN DOWNLINE RIPARIAN ZONE					
Tributary is: <i>(check one)</i> ☒ Natural ☐ Artificial, man-made ☐ Manipulated					
Stream Quality ^a: <i>(check one)</i> ☒ High ☐ Moderate ☐ Low					

Waterbody ID:

SNOK001

^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.

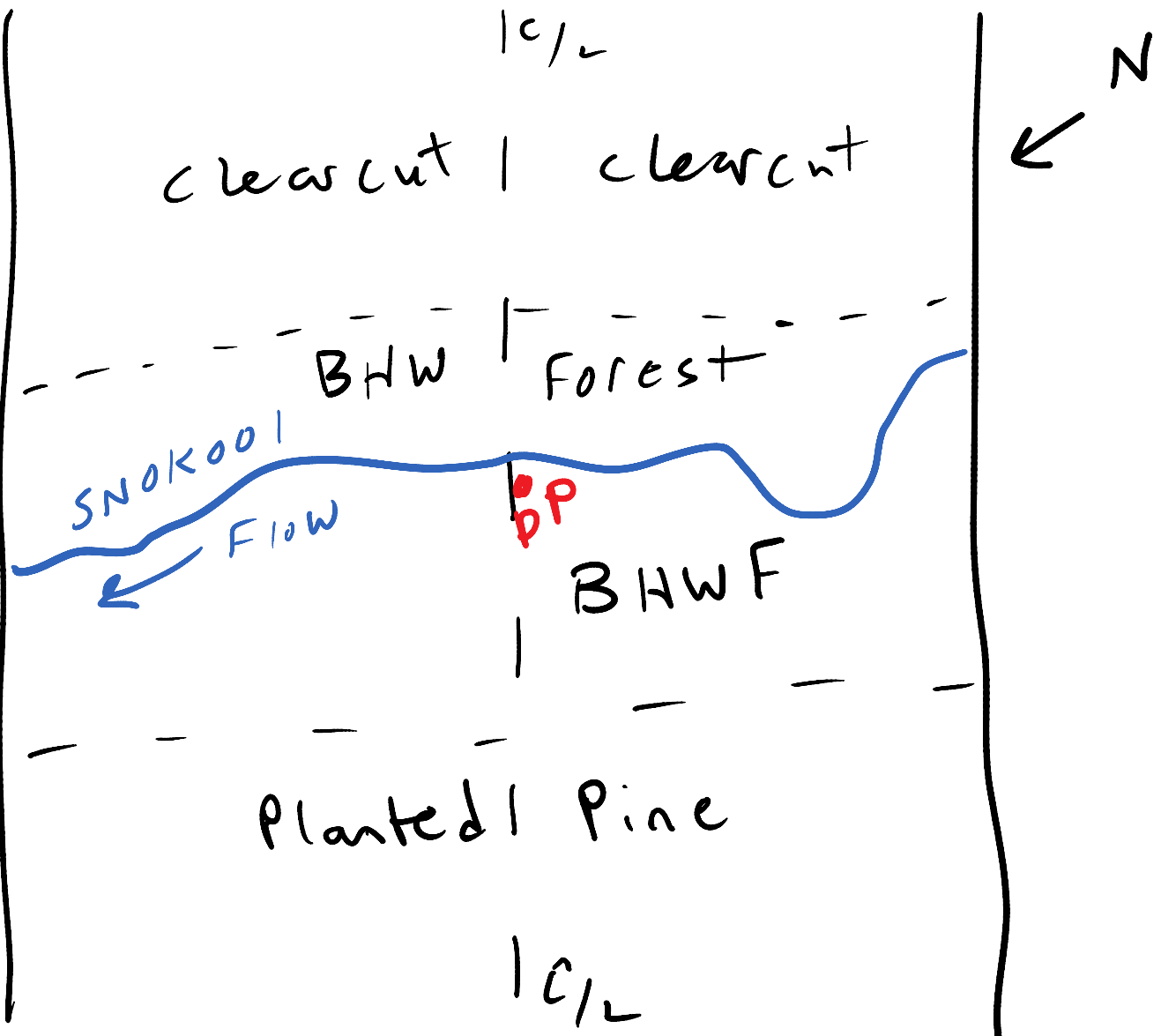
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

MODERATE TO LARGE PERENNIAL STREAM, GOOD AQUATIC LIFE DIVERSITY; TYPICAL PIEDMONT BOTTOMLAND HW COMMUNITY

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





Waterbody point snok001 facing northeast and downstream



Waterbody point snok001 facing southwest and upstream



Waterbody point snok001 facing east and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIBUTARY TO ELLIS CREEK		Waterbody ID: SNOK002
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-002		Nearest Milepost: 223		Associated Wetland ID(s): WNOK002F
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 3 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 1 ft.		☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
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: 2 ft.
Depth of Water: (Approx.) 0.5 ft.		N/A ☐		N/A ☐
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.1 fps		Bank height Right: 3 ft. Left: 3 ft.
N/A ☐		N/A ☐		Bank slope Right: 60 degrees Left: 60 degrees
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: NA % NA % NA % 10 % 80 % 5 % 5 % NA %				
Width of Riparian Zone: >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
N/A ☐		Avg. DBH of Dominants: (approx.) 12 in. 3 in.		
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, BLACK OAK, WHITE OAK, PAW PAW, SEDGES, JOE PYE WEED				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): UNDERCUT BANKS, POOLS, SOFT SANDY SEDIMENT, CWD, OVERHANGING VEG				
Aquatic Organisms Observed (list): FROGS, WATER STRIDERS				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): LOGGING IN UPLINE RIPARIAN ZONE				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK002

^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.

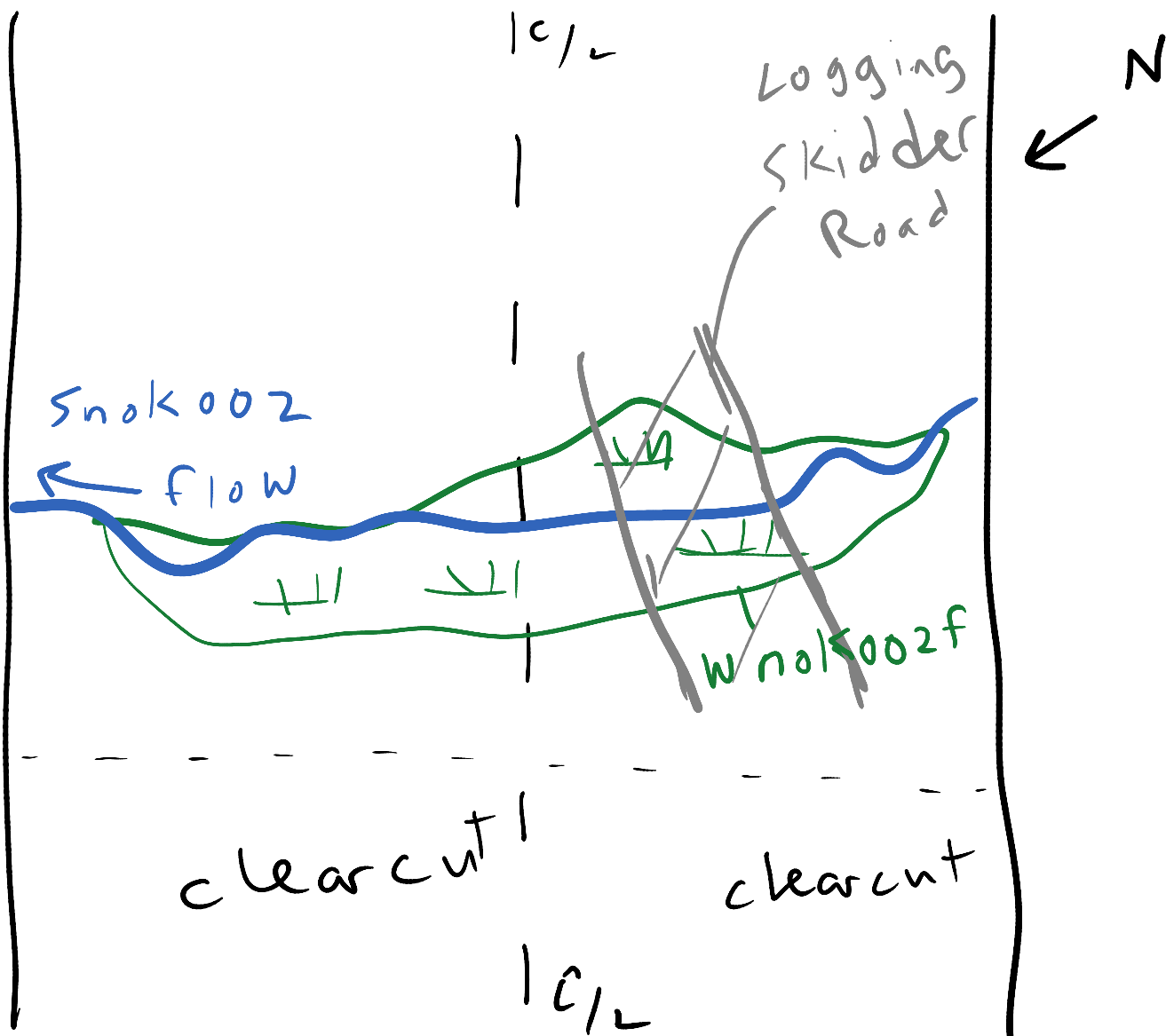
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL INTERMITTENT STREAM WITH HEADWATER SEEPAGE WETLAND ADJACENT; SKIDDER CROSSING IN CORRIDOR

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





Waterbody point snok002 facing northeast and downstream



Waterbody point snok002 facing southwest and upstream



Waterbody point snok002 facing east and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIB TO ELLIS CREEK		Waterbody ID: SNOK003
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-003		Nearest Milepost: 223		Associated Wetland ID(s): NA
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 3 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 1 ft.		☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
Width of Waterbody - Top of Bank to Top of Bank: 8 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 3 ft.		Width of Waterbody - Water Edge to Water Edge: 2 ft.
Depth of Water: (Approx.) 0.5 ft.		N/A ☐		N/A ☐
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.1 fps		Bank height Right: 7 ft. Left: 4 ft.
N/A ☐		N/A ☐		Bank slope Right: 80 degrees Left: 60 degrees
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: NA % NA % 10 % 10 % 60 % 20 % NA % NA %				
Width of Riparian Zone: >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
N/A ☐		Avg. DBH of Dominants: (approx.) 12 in. 3 in.		
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, CEDAR, WHITE OAK, SOURWOOD, HICKORY, VIRGINIA CREEPER				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): UNDERCUT BANKS, RIFFLE/POOL COMPLEXES, SOFT SANDY SEDIMENT, CWD, OVERHANGING VEG				
Aquatic Organisms Observed (list): FROGS, WATER STRIDERS, CRAYFISH, EPT, FISH, DAMSELFLIES				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK003

^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.

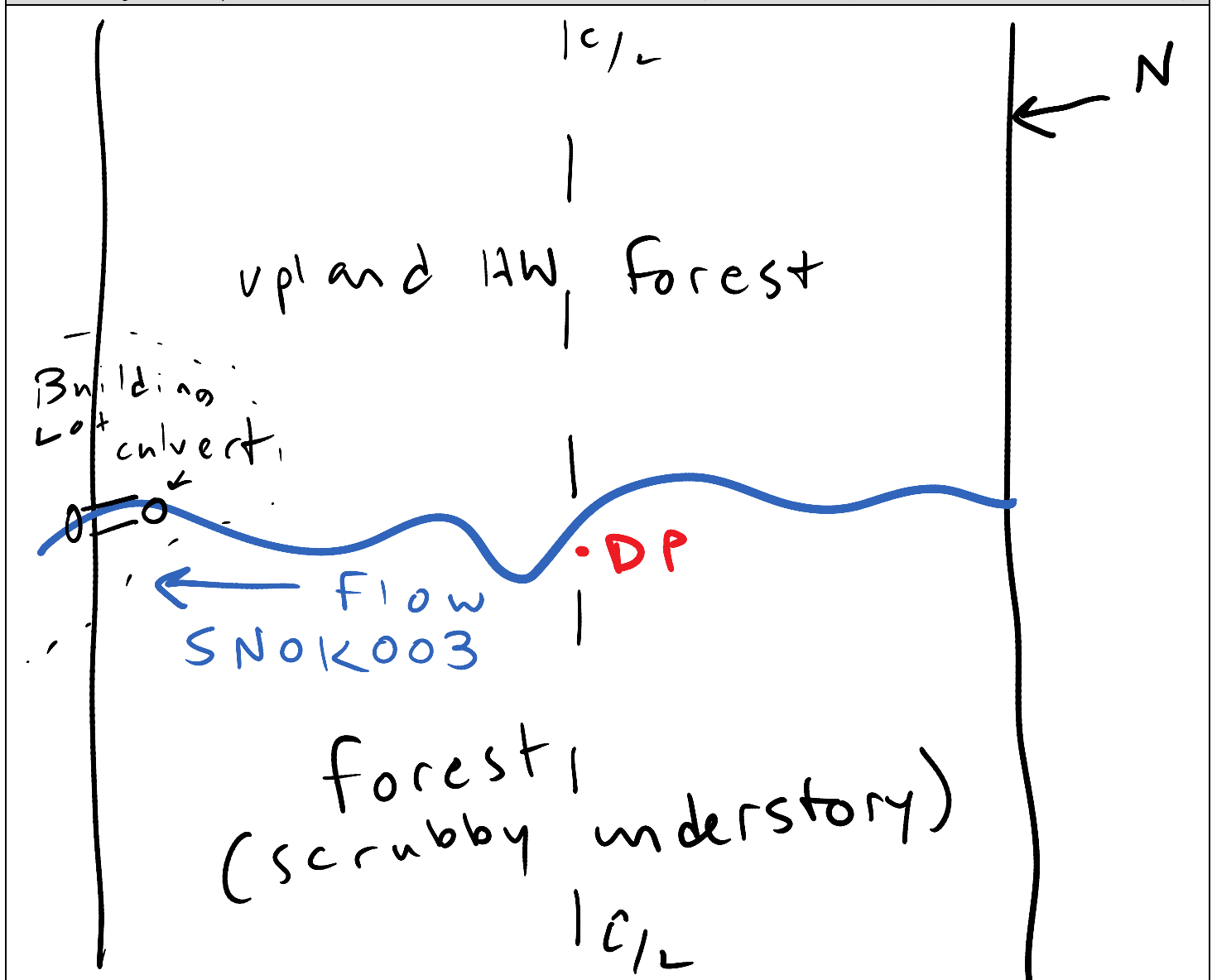
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL INTERMITTENT STREAM WITH INCISED BANKS; DENSE BANK VEGETATION

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





Waterbody point snok003 facing northeast and downstream



Waterbody point snok003 facing southwest and upstream



Waterbody point snok003 facing east and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Ellis Creek		Waterbody ID: SNOM011
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: SG, EB
Tract Number(s): 12-006, 12-005		Nearest Milepost: 223.62		Photos: 3276-3278, X U D
Survey Type: (check one)		Associated Wetland ID(s): NA		
☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one)				
☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one)				
☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 3 ft.		OHWM Indicator: (check all that apply)		
Height: 0.3 ft.		☒ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining		
N/A ☐		☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: 4 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 3 ft.		Width of Waterbody - Water Edge to Water Edge: 1 ft.
Depth of Water: (Approx.) 0.1 ft.		N/A ☐		
Sinuosity: (check one)		Water velocity: (Approx.)		Bank height
☐ Straight ☒ Meandering		0.1 fps N/A ☐		Right: 1 ft. Left: 2 ft.
Bank slope		Right: 35 degrees Left: 90 degrees		
Qualitative Attributes				
Water Appearance: (check one)				
☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply)				
☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: NA % NA % 45 % 35 % 5 % 15 % NA % NA %				
Width of Riparian Zone: N/A ☐ >100 ft.		Vegetative Layers: (check all that apply)		
		☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
		Avg. DBH of Dominants: (approx.) 10 in. 1 in.		
Dominant Bank Vegetation (list):				
RED MAPLE, WHITE OAK, RED OAK, TULIP TREE , SWEET GUM, HICKORY, REDBUD TREE, CHRISTMAS FERN, , HONEYSUCKLE, JUNIPER.				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools):				
UNDERCUT ROOTS, SUBMERGED WOOD, WOODY DEBRIS				
Aquatic Organisms Observed (list):				
CRAYFISH				
T&E Species Observed (list):				
NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes):				
NA				
Tributary is: (check one)				
☐ Natural ☐ Artificial, man-made ☒ Manipulated				
Stream Quality ^a : (check one)				
☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOM011

^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.

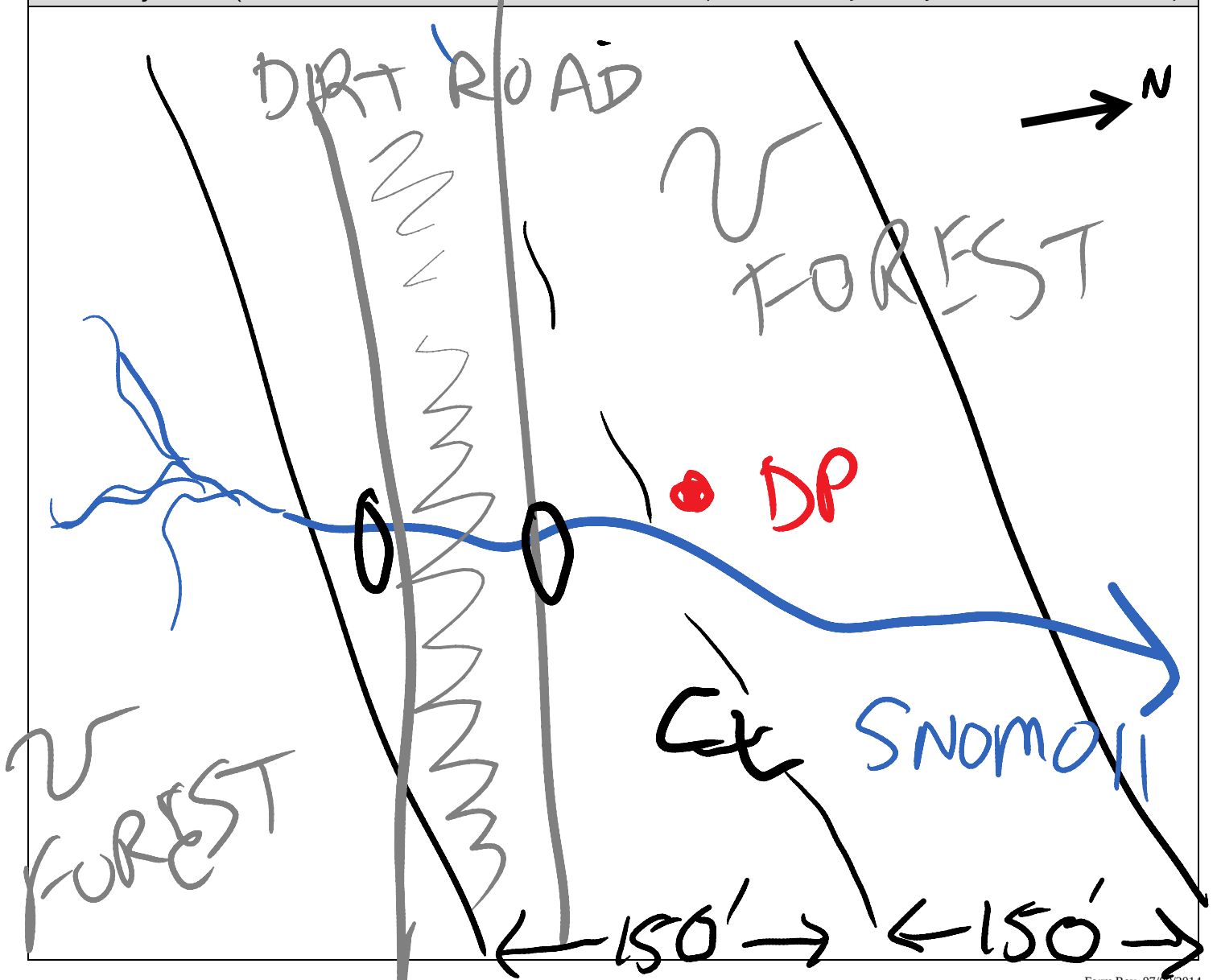
Low Quality: Channel is actively down cutting or widening; rip rap and channelization excessive; natural vegetation less than 1/3 of the active channel width on each side; lack of regeneration; filtering function severely compromised; banks unstable (eroding); water color is muddy and turbid; obvious 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:

FLOW IS TO THE NORTHEAST. STREAM CHARACTERISTICS ARE VARIABLE. HEADWATER BEGINS AS DENDRITIC DRAINAGES AT SOUTH SIDE OF ROW. STREAM BISECTED BY ROAD JUST SOUTH OF CENTERLINE- 12 INCH PLASTIC CULVERT IN PLACE. STREAM EXTENDS ONTO NEXT PARCEL TO SOUTHWEST. 12-005

MANY DRAINAGE SWALES (SOME DEEPLY INCISED) IN PARCEL; NONE MET CRITERIA FOR STREAM RESOURCE MAPPING.

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





Waterbody point snom011 facing East and across



Waterbody point snom011 facing Southwest and upstream



Waterbody point snom011 facing Northeast and downstream

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: ELLIS CREEK		Waterbody ID: SNOK005
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-007/008		Nearest Milepost: 224		Associated Wetland ID(s): WNOK003
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 18 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 1.5 ft.		☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
Width of Waterbody - Top of Bank to Top of Bank: 24 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 18 ft.		Width of Waterbody - Water Edge to Water Edge: 7 ft.
Depth of Water: (Approx.) 0.5 ft.		N/A ☐		N/A ☐
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.5 fps		Bank height Right: 7 ft. Left: 7 ft.
N/A ☐		N/A ☐		Bank slope Right: 70 degrees Left: 70 degrees
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: NA % NA % NA % 10 % 80 % 10 % NA % NA %				
Width of Riparian Zone: 100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
N/A ☐		Avg. DBH of Dominants: (approx.) 12 in. 3 in.		
Dominant Bank Vegetation (list): CHRISTMAS FERN, RIVER BIRCH, HACKBERRY, IRONWOOD, BLACK WALNUT, PAW PAW, VA WILD RYE				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SOFT SANDY SEDIMENT, LWD, LEAF PACKS, OVERHANGING VEG				
Aquatic Organisms Observed (list): FISH, CRAYFISH, FROGS, HELLGRAMITES, COLEOPTERANS, EPT, CORBICULA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK005

^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.

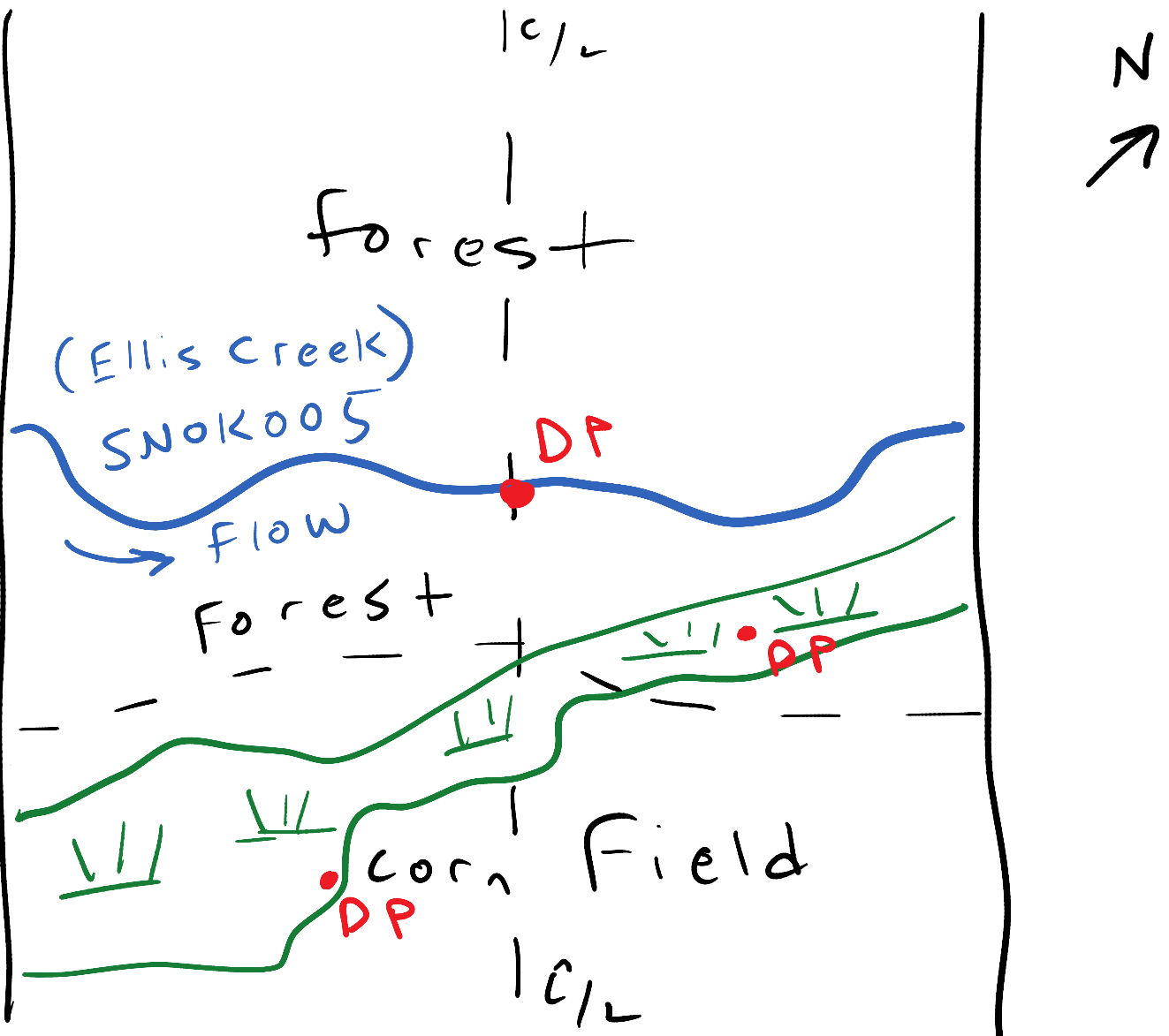
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

LARGE PERENNIAL STREAM WITH ADJACENT FLOODPLAIN WETLANDS

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





Waterbody point snok005 facing northeast and downstream



Waterbody point snok005 facing southwest and upstream



Waterbody point snok005 facing west and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIB TO ELLIS CREEK		Waterbody ID: SNOK004
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-008		Nearest Milepost: 224		Associated Wetland ID(s): NA
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 2 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 1 ft.		☒ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
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 ☒ ft.
Depth of Water: (Approx.) N/A ☒ ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) N/A ☒ fps		Bank height Right: 4 ft. Left: 4 ft.
				Bank slope Right: 80 degrees Left: 80 degrees
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: NA % NA % NA % 5 % 65 % 30 % NA % NA %				
Width of Riparian Zone: N/A ☐ >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
		Avg. DBH of Dominants: (approx.) 5 in. 2 in.		
Dominant Bank Vegetation (list): CHRISTMAS FERN, CEDAR, BLACK CHERRY, ULMUS SP., QUERCUS SPP., HONEYSUCKLE, VA WILD RYE				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): STAGNANT POOLS				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): FARMING- CORN/HAY- IN RIPARIAN ZONE				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK004

^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.

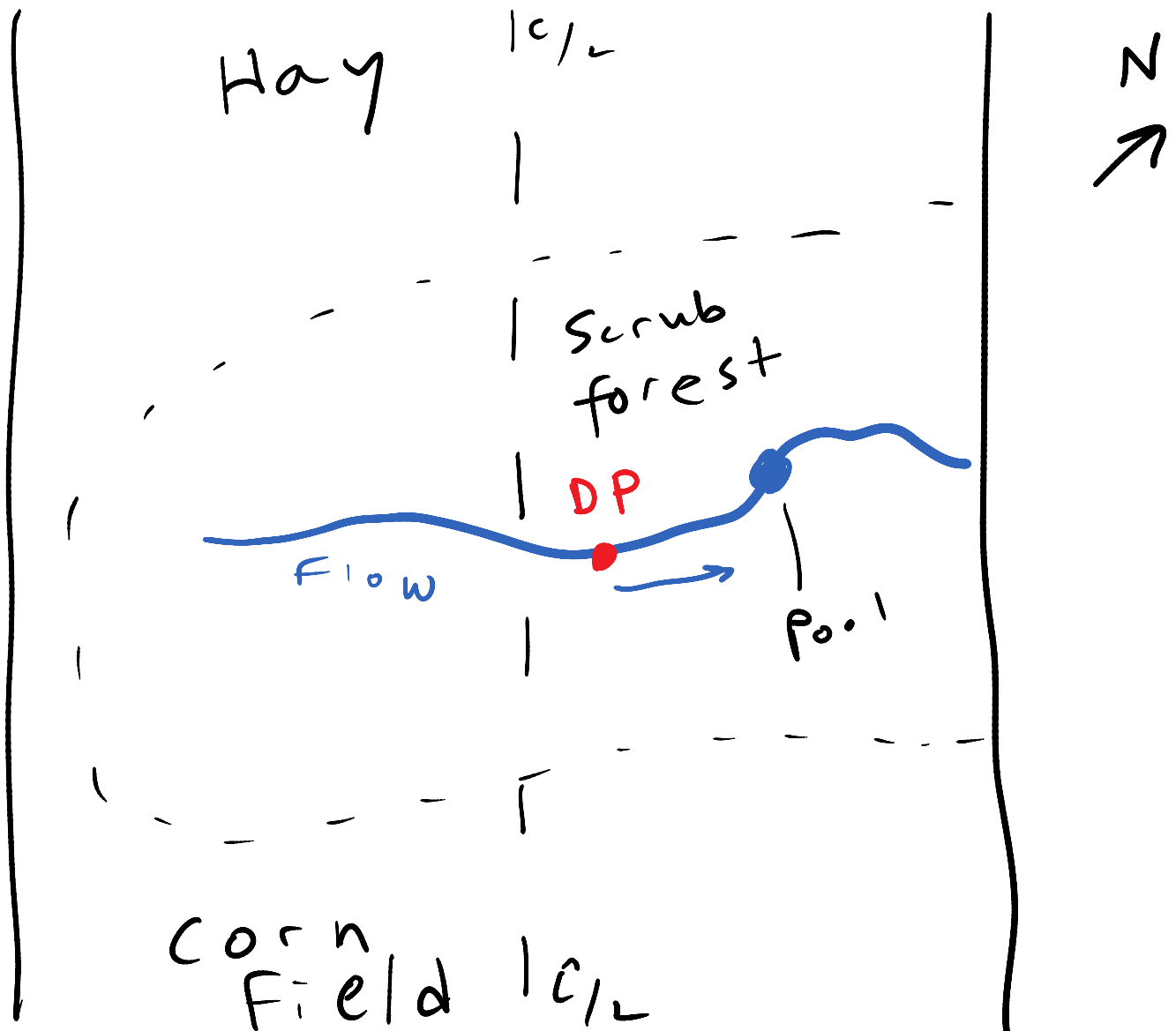
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL INTERMITTENT STREAM WITH AG LAND NEARBY; NO FLOW; STAGNANT POOL

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





Waterbody point snok004 facing north and downstream



Waterbody point snok004 facing south and upstream



Waterbody point snok004 facing west and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIB TO FLAT CREEK		Waterbody ID: SNOK006
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-010		Nearest Milepost: 225		Associated Wetland ID(s): WNOK005
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 3 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 1 ft.		☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
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: N/A ☒ ft.
Depth of Water: (Approx.) N/A ☒ ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) N/A ☒ fps		Bank height Right: 2 ft. Left: 2 ft.
				Bank slope Right: 60 degrees Left: 60 degrees
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☒ Sand ☒ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: NA % NA % NA % NA % 60 % 30 % 10 % NA %				
Width of Riparian Zone: N/A ☐ >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
		Avg. DBH of Dominants: (approx.) 5 in. 2 in.		
Dominant Bank Vegetation (list): CHRISTMAS FERN, REDBUD, BLACK CHERRY, LOBLOLLY PINE, TAG ALDER, HONEYSUCKLE, BLACK HAW				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): PAST CLEARCUTTING, FOREST REGENERATION				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK006

^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

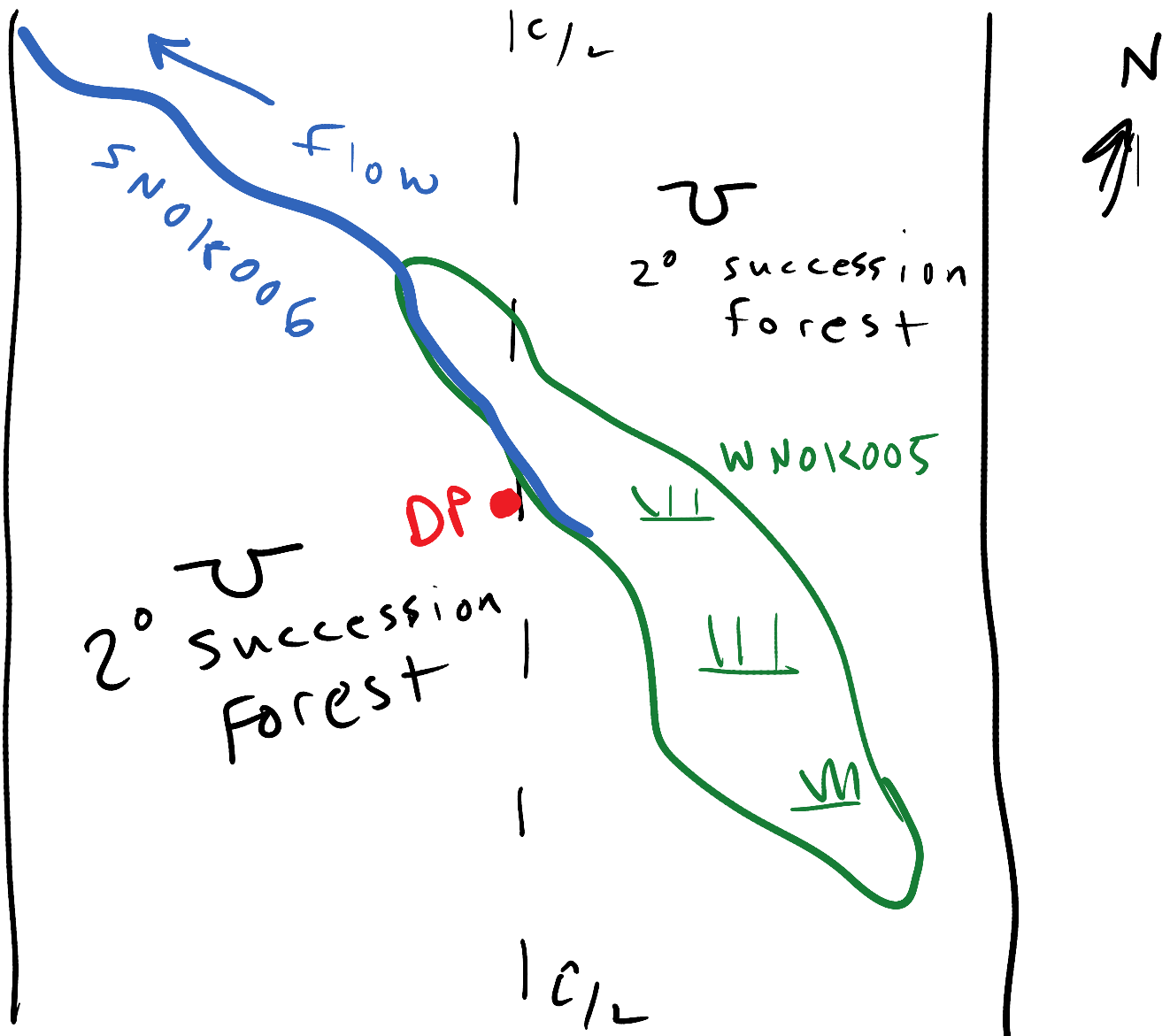
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL HEADWATER INTERMITTENT STREAM WITH TIMBER/AG LAND NEARBY; NO FLOW AT DATA POINT; STREAM FLOWS FOR APPROXIMATELY 1000 FT EAST IN CORRIDOR BEFORE EXITING; SOME POOLS BELOW DATA POINT. OBSERVED FROGS, FISH, WATER STRIDERS, MOSQUITO LARVAE WITHIN SURVEYED ROW.

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





Waterbody point snok006 facing East and downstream



Waterbody point snok006 facing West and upstream



Waterbody point snok006 facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIB TO FLAT CREEK		Waterbody ID: SNOK007
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-010		Nearest Milepost: 225		Photos: 100-0279 TO 0283
Associated Wetland ID(s): NA				
Survey Type:				
(check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification:				
(check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type:				
(check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 5 ft.		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining		
Height: 2 ft.		☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
N/A ☐				
Width of Waterbody - Top of Bank to Top of Bank: 15 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 5 ft.		Width of Waterbody - Water Edge to Water Edge: 3 ft.
Depth of Water: (Approx.) 0.25 ft.		N/A ☐		N/A ☐
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.1 fps		Bank height Right: 9 ft. Left: 9 ft.
N/A ☐		N/A ☐		Bank slope Right: 80 degrees Left: 80 degrees
Qualitative Attributes				
Water Appearance:				
(check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate:				
(check all that apply) ☒ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☐ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: 10 % NA % 15 % 35 % 30 % 10 % NA % NA %				
Width of Riparian Zone: 100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
N/A ☐		Avg. DBH of Dominants: (approx.) 12 in. 3 in.		
Dominant Bank Vegetation (list):				
CHRISTMAS FERN, CEDAR, TULIP POPLAR, WHITE OAK, DOGWOOD, VA WILD RYE, IRONWOOD				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools):				
COBBLE-BEDROCK, POOLS, UNDERCUT BANKS, OVERHANGING VEGETATION				
Aquatic Organisms Observed (list):				
FISH, WATER STRIDERS, SNAKES, FROGS, CRAYFISH, MAYFLIES				
T&E Species Observed (list):				
NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes):				
LOGGING IN DOWNLINE RIPARIAN ZONE				
Tributary is:				
(check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a :				
(check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK007

^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

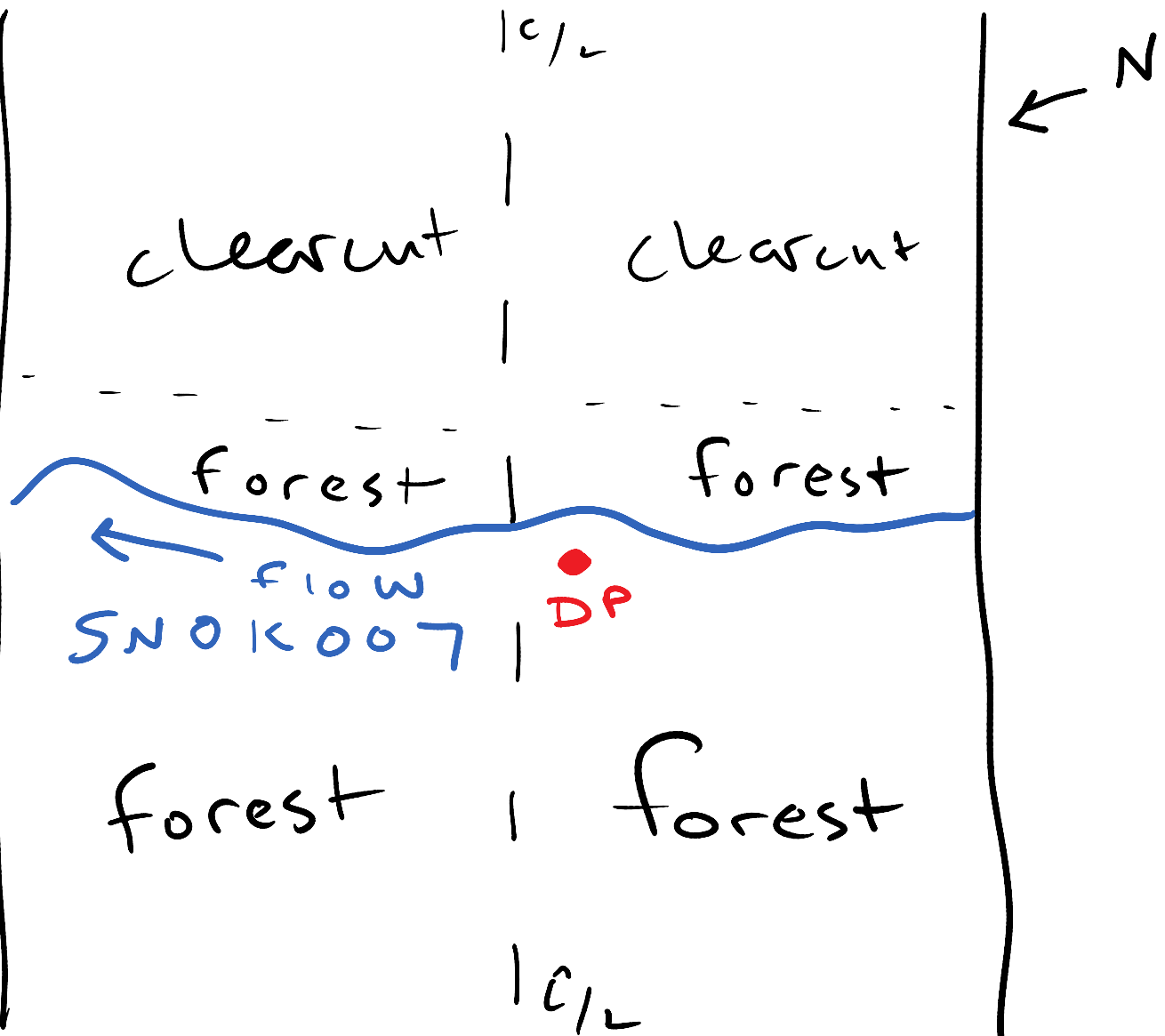
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

PERENNIAL STREAM WITH PAST LOGGING NEARBY; LOW FLOW AT DATA POINT; STREAM HABITAT IS GOOD

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





Waterbody point snok007 facing Northeast and downstream



Waterbody point snok007 facing Southwest and upstream



Waterbody point snok007 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: FLAT CREEK		Waterbody ID: SNOK008
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-010/ 12-011		Nearest Milepost: 225		Associated Wetland ID(s): WNOK006
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 20 ft. Height: 3 ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining ☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: 30 ft.	Width of Waterbody - Toe of Slope to Toe of Slope: 20 ft.	Width of Waterbody - Water Edge to Water Edge: 10 ft. N/A ☐	Depth of Water: (Approx.) 0.5 ft. N/A ☐	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) 0.5 fps N/A ☐	Bank height Right: 6 ft. Left: 6 ft.	Bank slope Right: 60 degrees Left: 60 degrees	
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☐ Sand ☒ Silt/ clay ☐ Organic ☐ Other: % of Substrate: NA % NA % NA % 15 % 70 % 15 % NA % NA %				
Width of Riparian Zone: 100 ft. N/A ☐	Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs Avg. DBH of Dominants: 12 in. 3 in. (approx.)			
Dominant Bank Vegetation (list): PAW PAW, BOX ELDER, SPICEBUSH, HICKORY, RIVER BIRCH, VA WILD RYE, ASH				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SOFT SANDY SEDIMENT, POOLS, UNDERCUT BANKS, OVERHANGING VEGETATION				
Aquatic Organisms Observed (list): FISH, COLEOPTERANS, WATER STRIDERS, MAYFLIES, CRAYFISH, FROGS, ASIATIC CLAM				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): LOGGING IN UPLINE RIPARIAN WETLANDS				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK008

^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

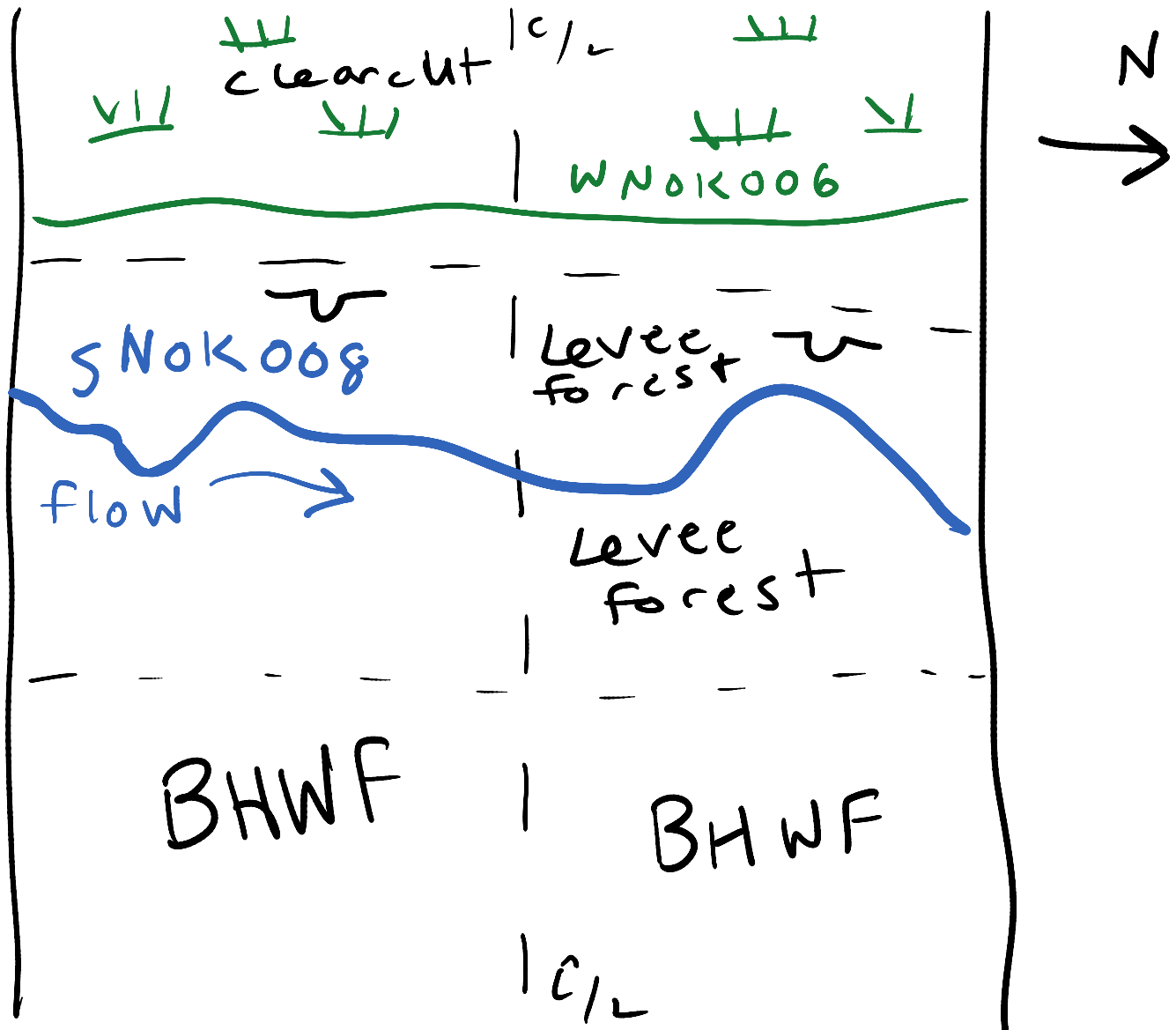
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

LARGE PERENNIAL STREAM WITH PAST LOGGING NEARBY; GOOD FLOW AT DATA POINT; STREAM HABITAT IS GOOD; FLOATING LOG COMMUNITIES

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





Waterbody point snok008 facing South and downstream



Waterbody point snok008 facing North and upstream



Waterbody point snok008 facing West and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNNAMED TRIB TO FLAT CREEK		Waterbody ID: SNOK009
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS, WM
Tract Number(s): 12-012		Nearest Milepost: 226		Photos: 100-0276 TO 0278
Associated Wetland ID(s): WNOK008				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>2</u> ft. Height: <u>0.5</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☐ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☐ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>5</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 ☒ <u> </u> ft.
Depth of Water: (Approx.) N/A ☒ <u> </u> ft.				
Sinuosity: (check one) ☒ Straight ☐ Meandering		Water velocity: (Approx.) <u> </u> fps N/A ☒		Bank height Right: <u>5</u> ft. Left: <u>5</u> ft.
Bank slope Right: <u>70</u> degrees Left: <u>70</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☒ Sand ☒ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>60</u> % <u>10</u> % <u>30</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): XMAS FERN, TULIP POPLAR, RED MAPLE, LOBLOLLY PINE, CARYA SP., HONEYSUCKLE, PAW PAW				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK009

^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

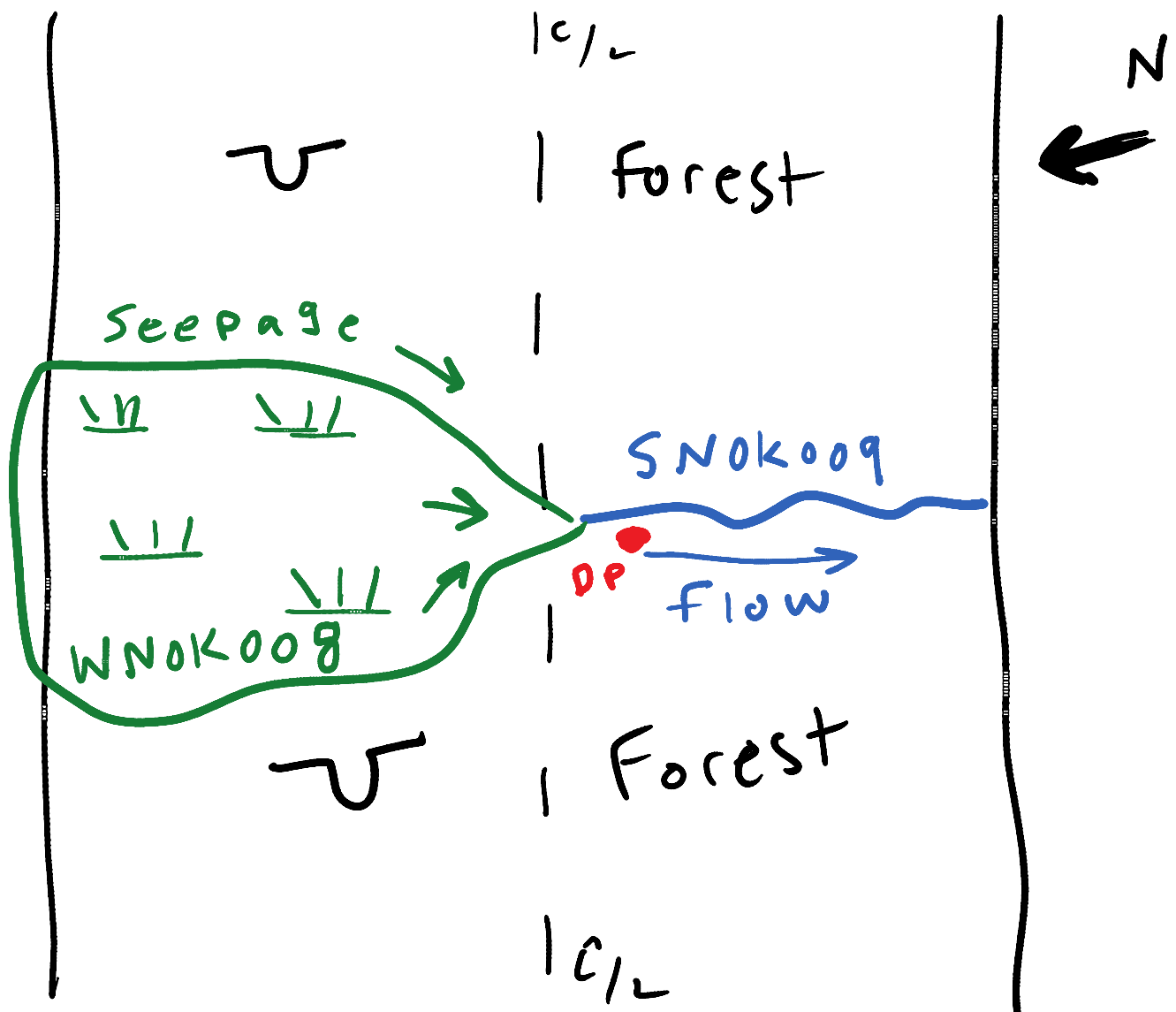
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL HEADWATER EPHEMERAL STREAM IN A SEMI-MATURE MIXED PINE-HW FOREST ; NO FLOW AT DATA POINT

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





Waterbody point snok009 facing South and downstream



Waterbody point snok009 facing North and upstream



Waterbody point snok009 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT TO LITTLE CREEK		Waterbody ID: SNOM007
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: SG, EB
Tract Number(s): 12-015		Nearest Milepost: 227.16		Photos: 3229-3231, X U D
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 3 ft. Height: 1 ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☒ Abrupt plant community change ☐ 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: 3 ft.		Width of Waterbody - Water Edge to Water Edge: 1.5 ft. N/A ☐
Depth of Water: (Approx.) 0.3 ft. N/A ☐		Bank height Right: 5.0 ft. Left: 3.5 ft.		
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.4 fps N/A ☐		Bank slope Right: 90 degrees Left: 60 degrees
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☒ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: 5 % NA % 5 % 40 % 35 % 15 % NA % NA %				
Width of Riparian Zone: N/A ☐ >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs Avg. DBH of Dominants: 10 in. 3 in.		
Dominant Bank Vegetation (list): SWEETGUM, RED OAK, BEECH, PAW-PAW, IRONWOOD, SPICEBUSH, CHRISTMAS FERN				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SMALL STRETCHES OF RIFFLES, OVERHANGING BANKS, SOME WOODY DEBRIS, SMALL WATERFALL OFF BEDROCK				
Aquatic Organisms Observed (list): FISH, WATER STRIDERS				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOM007

^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.

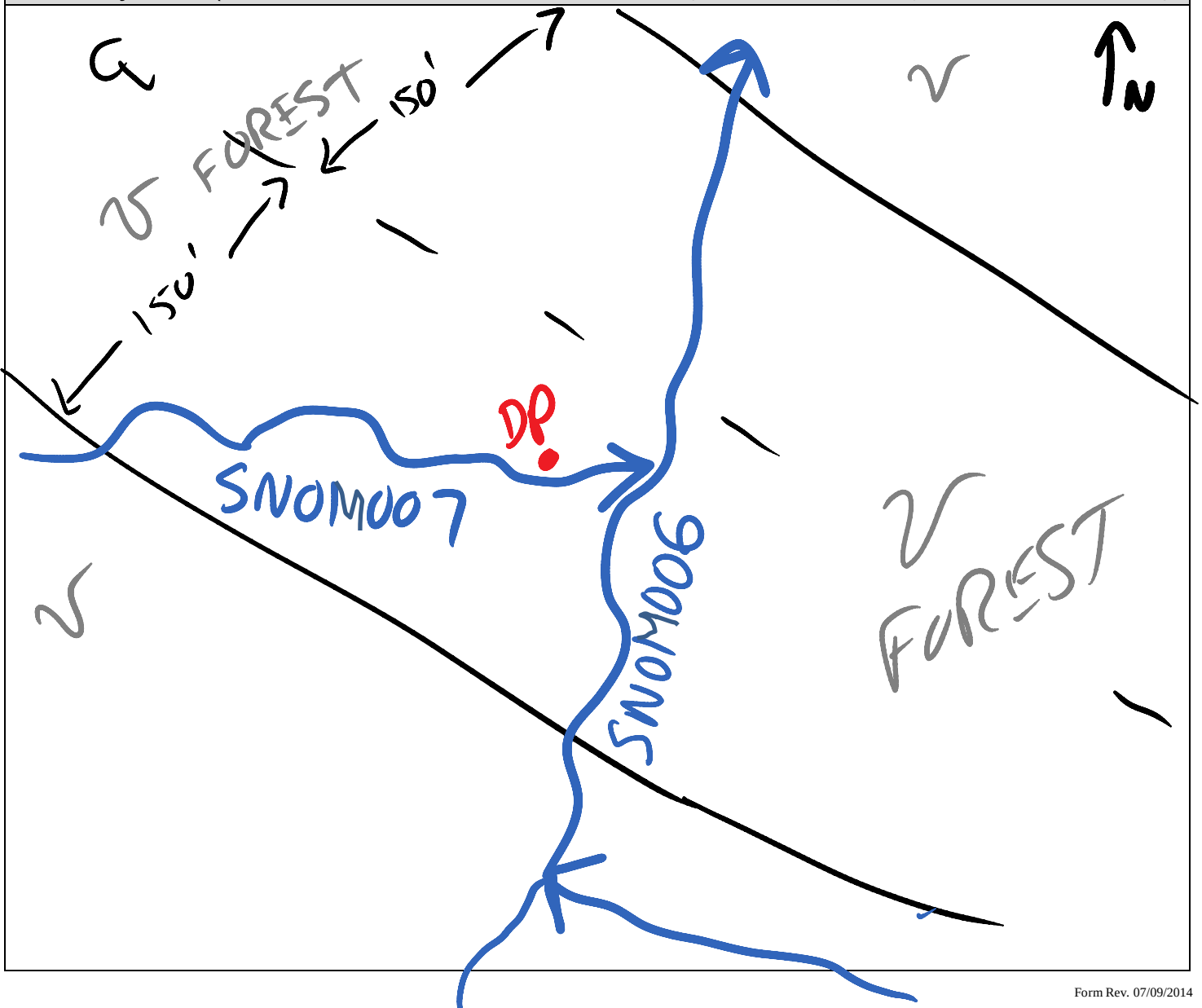
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

FLOW IS TO THE EAST, TIES INTO PERRENIAL STREAM SNOM006.

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





Waterbody point snom007 facing West and upstream



Waterbody point snom007 facing East and downstream



Waterbody point snom007 facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: LITTLE CREEK		Waterbody ID: SNOM006
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: SG, EB
Tract Number(s): 12-015		Nearest Milepost: 227.16		Photos: 3225-3227, X U D
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 10 ft. Height: 1 ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☒ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: 20 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 10 ft.		Width of Waterbody - Water Edge to Water Edge: 4.0 ft. N/A ☐
Depth of Water: (Approx.) 0.4 ft. N/A ☐		Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.4 fps N/A ☐
Bank height Right: 4.0 ft. Left: 6.0 ft.		Bank slope Right: 70 degrees Left: 90 degrees		
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☒ Bedrock ☐ Boulder ☒ Cobble ☐ Gravel ☒ Sand ☐ Silt/ clay ☐ Organic ☐ Other: % of Substrate: 20 % NA % 5 % NA % 75 % NA % NA % NA %				
Width of Riparian Zone: N/A ☐ >100 ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs Avg. DBH of Dominants: (approx.) 10 in. 3 in.		
Dominant Bank Vegetation (list): SWEETGUM, RED OAK, BEECH, PAW-PAW, IRONWOOD, SPICEBUSH, CHRISTMAS FERN				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SMALL STRETCHES OF RIFFLES, OVERHANGING BANKS, SOME WOODY DEBRIS SMALL POOLS				
Aquatic Organisms Observed (list): FISH, FROGS, WATER STRIDERS				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOM006

^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.

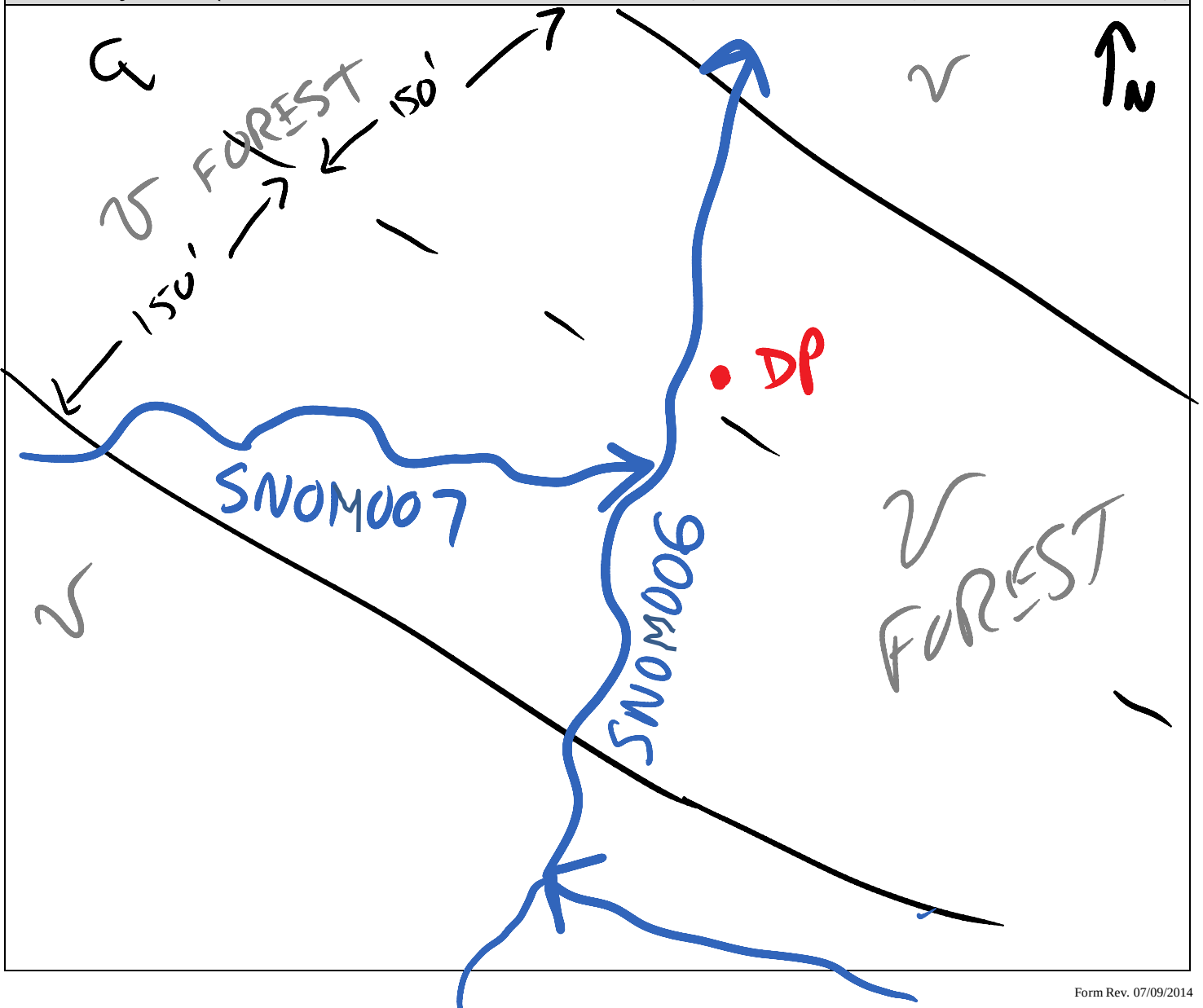
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

FLOW IS TO THE NORTH, STREAM SNOM007 TIES INTO STREAM APPROX 100 FT TO SWATHWEST.

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





Waterbody point snom006 facing South and upstream



Waterbody point snom006 facing North and downstream



Waterbody point snom006 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Little Creek		Waterbody ID: SNOM005
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: SG, EB
Tract Number(s): 12-016		Nearest Milepost: 227.3		Photos: 3221-3223, X U D
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>1</u> ft. Height: <u>0.3</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☐ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>10</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 ☒
Depth of Water: (Approx.) <u>0</u> ft. N/A ☒				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0</u> fps N/A ☒		Bank height Right: <u>3.5</u> ft. Left: <u>3.0</u> ft.
Bank slope Right: <u>80</u> degrees Left: <u>60</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☒ Sand ☒ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>20</u> % <u>55</u> % <u>25</u> % <u>NA</u> %				
Width of Riparian Zone: <u>>100</u> ft. N/A ☐		Vegetative Layers: (check all that apply) ☒ Trees: <u>10</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs Avg. DBH of Dominants: (approx.)		
Dominant Bank Vegetation (list): LOBLOLLY PINE, SWEETGUM, RED OAK, PAW-PAW, IRONWOOD, CHRISTMAS FERN				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOM005

^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.

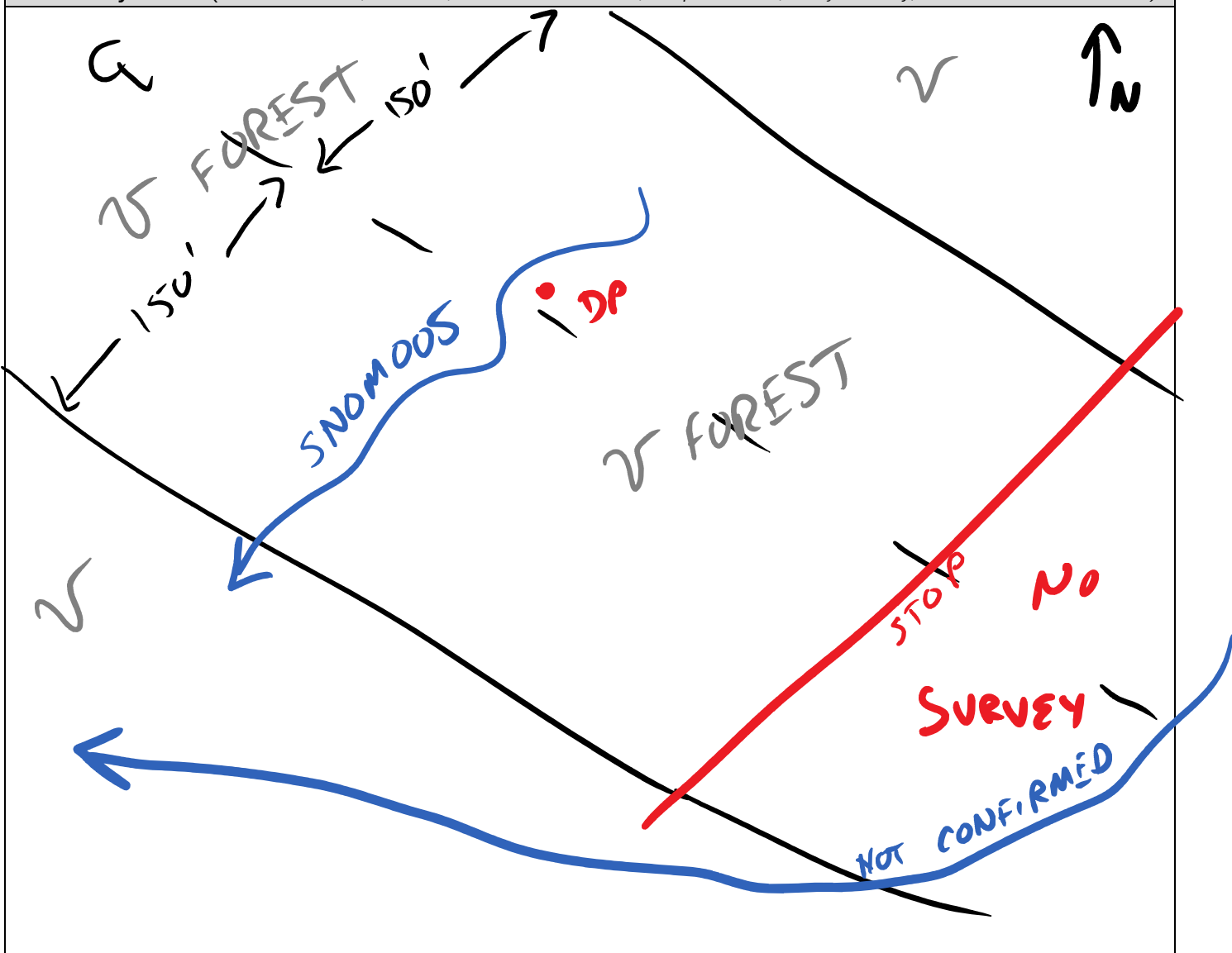
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

FLOW IS TO THE SOUTH-SOUTHWEST, TIES INTO A STREAM JUST OUTSIDE THE SOUTH ROW EDGE. MARGINAL FEATURE; EVIDENCE OF FLOW BARELY DISCERNABLE IN SOME REACHES, BUT PRESENT AT CENTERLINE AND BECOMING MORE DEFINED TO SOUTH. THE STREAM JUST OUTSIDE OF ROW MAY ENTER THE ROW TO THE EAST (UNABLE TO SURVEY TO EAST-PROPERTY OFF LIMITS).

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





Waterbody point snom005 facing Northeast and upstream



Waterbody point snom005 facing Southwest and
downstream



Waterbody point snom005 facing Northwest and
across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT to Little Creek		Waterbody ID: Snoc100
State: Virginia		County: Nottoway	Company: NRG	Crew Member Initials: CR, AS, SA
Tract Number(s): 12-016, 12-017		Nearest Milepost: 231		Associated Wetland ID(s):
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: 2 ft.		OHWM Indicator: (check all that apply) ☐ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☐ Scouring ☐ Water staining		
Height: 0.3 ft.		☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
N/A ☐				
Width of Waterbody - Top of Bank to Top of Bank: 25 ft.		Width of Waterbody - Toe of Slope to Toe of Slope: 0.5 ft.		Width of Waterbody - Water Edge to Water Edge: 0.1 ft.
Depth of Water: (Approx.) 0.1 ft.		N/A ☐		N/A ☐
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) 0.2 fps		Bank height Right: 12 ft. Left: 10 ft.
N/A ☐		N/A ☐		Bank slope Right: 70 degrees Left: 70 degrees
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☐ Clear ☒ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: _____ % _____ % _____ % 10 % 60 % _____ % 30 % _____ %				
Width of Riparian Zone: _____ ft.		Vegetative Layers: (check all that apply) ☒ Trees: ☒ Saplings/Shrubs: ☒ Herbs		
N/A ☐		Avg. DBH of Dominants: (approx.) 8 in. 2 in.		
Dominant Bank Vegetation (list): Tulip poplar, mockernut hickory, loblolly pine, red maple, white oak, trumpet creeper, Japanese honeysuckle, Christmas fern				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): None				
Aquatic Organisms Observed (list): None				
T&E Species Observed (list): None				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): None				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

Snoc100

^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.

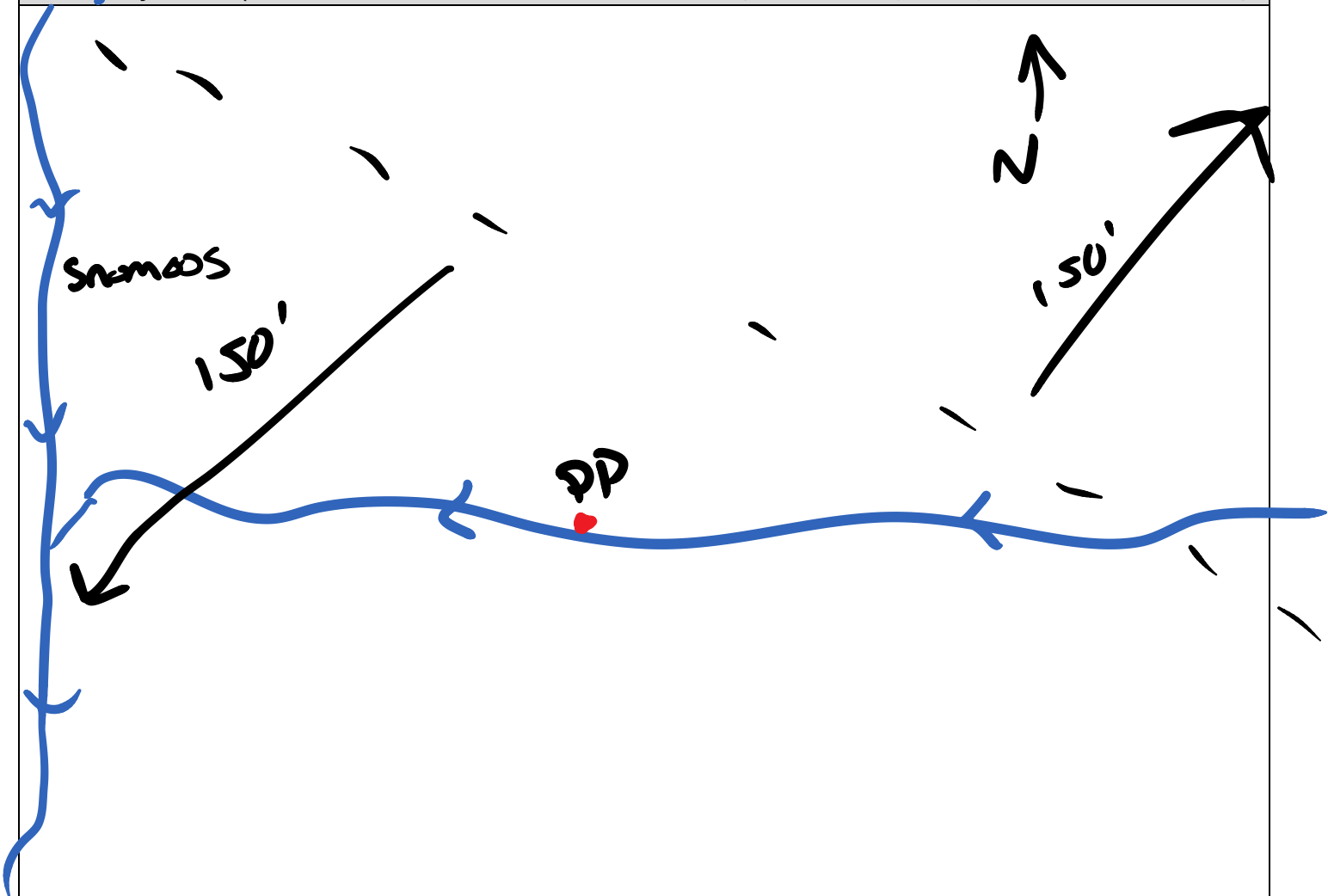
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

Flows into snom005

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





Waterbody SNOC100 facing east upstream



Waterbody SNOC100 facing west downstream



Waterbody SNOC100 facing south across

Linear Waterbody Data Sheet

Survey Description				
Project Name: ATLANTIC COAST PIPELINE		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOL001
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: WLM, RMS
Tract Number(s): 12-020 AND 12-021		Nearest Milepost: 228		Photos: 100-1118 TO 1120
Associated Wetland ID(s): WNOL001				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>4</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☐ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>7</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 ☐ <u>3</u> ft.
Depth of Water: (Approx.) N/A ☐ <u>0.3</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0.1</u> fps N/A ☐		Bank height Right: <u>3</u> ft. Left: <u>3</u> ft.
Bank slope Right: <u>30</u> degrees Left: <u>30</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☒ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>5</u> % <u>NA</u> % <u>5</u> % <u>10</u> % <u>75</u> % <u>NA</u> % <u>5</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): TULIP POPLAR, RED MAPLE, SWEETGUM, BEECH, BLACKGUM, LADY FERN, VACCINIUM				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): RIFFLE/POOL COMPLEXES, BEDROCK SLIDES, UNDERCUT BANKS, CPOM				
Aquatic Organisms Observed (list): CRAYFISH,EPT				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOL001

^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.

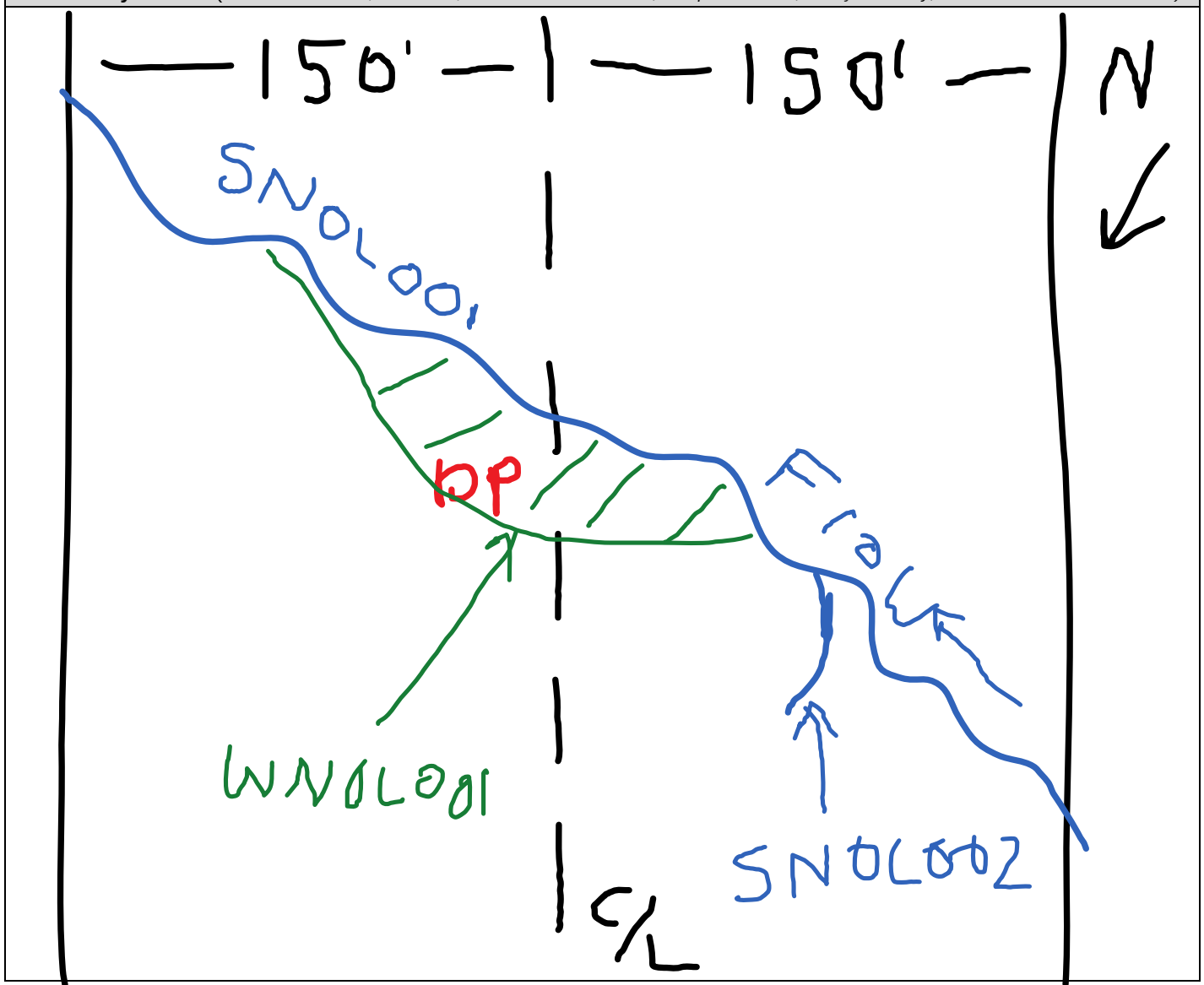
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

HIGH QUALITY HEADWATER PERENNIAL STREAM

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





Waterbody point snol001 facing West and upstream



Waterbody point snol001 facing East and downstream



Waterbody point snol001 facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SnoI002
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: RS, WM
Tract Number(s): 12-021 AND 12-020		Nearest Milepost:		Photos: 100-1131 to 1133
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>0.5</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☐ Clear line on bank ☐ Shelving ☒ Wrested vegetation ☒ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☐ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>10</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>3</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☒	Depth of Water: (Approx.) <u> </u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u> </u> fps N/A ☒	Bank height Right: <u>2.5</u> ft. Left: <u>2</u> ft.	Bank slope Right: <u>50</u> degrees Left: <u>75</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>10</u> % <u>90</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs			
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): Oak, hickory, poplar, fern, honeysuckle				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

Snol002

^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.

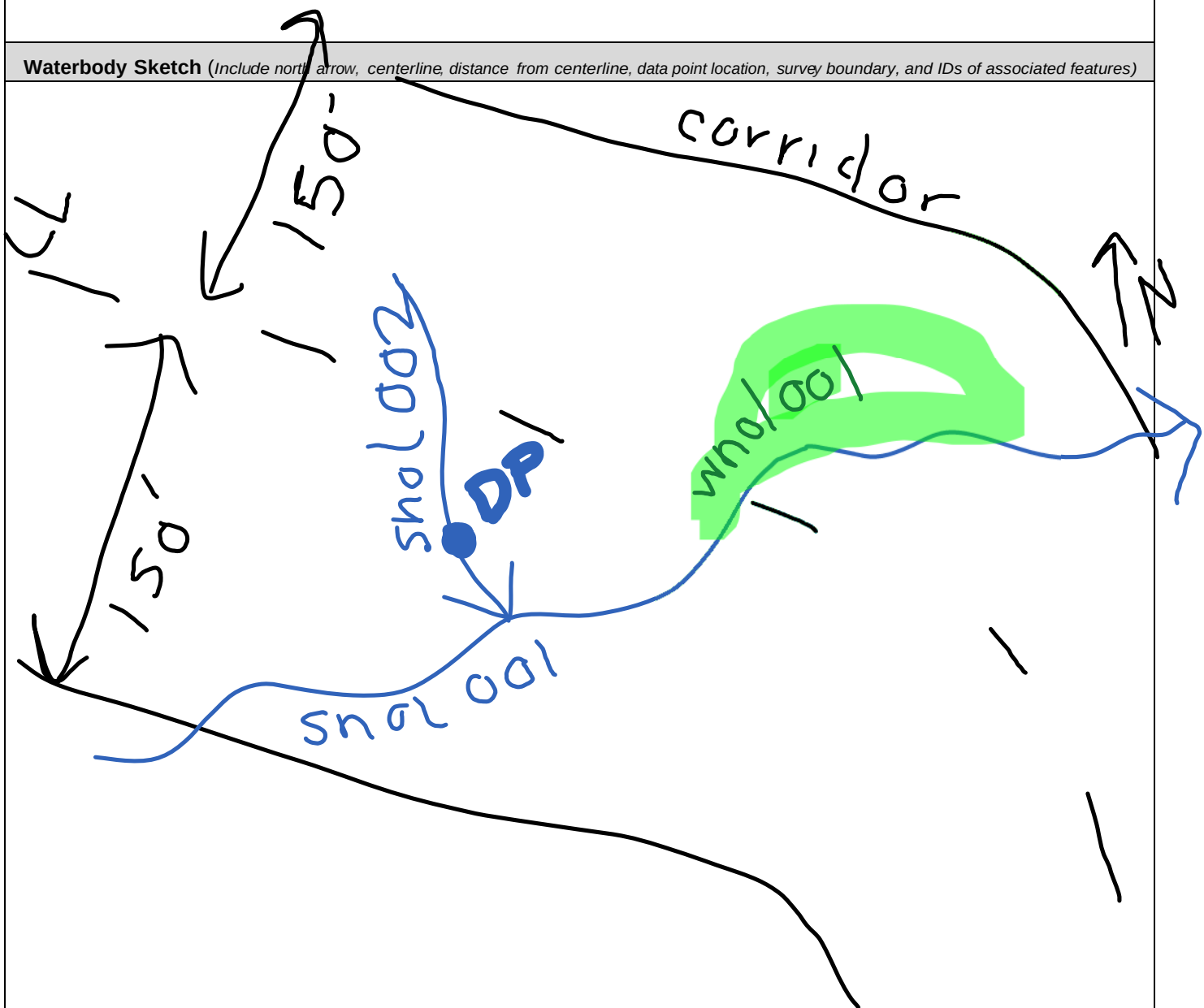
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

Small headwater ephemeral

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





Waterbody point snol002 facing North and upstream



Waterbody point snol002 facing South and downstream



Waterbody point snol002 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: ATLANTIC COAST PIPELINE		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOL003
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: WLM, RMS
Tract Number(s): 12-021		Nearest Milepost: 228		Photos: 100-1134 TO 1136
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>4</u> ft. Height: <u>2</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☐ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>12</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 ☒	Depth of Water: (Approx.) <u> </u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u> </u> fps N/A ☒	Bank height Right: <u>6</u> ft. Left: <u>6</u> ft.	Bank slope Right: <u>70</u> degrees Left: <u>80</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☒ Bedrock ☒ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: <u>5</u> % <u>10</u> % <u>5</u> % <u>5</u> % <u>45</u> % <u>30</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: <u>>100</u> ft. N/A ☐	Vegetative Layers: (check all that apply) ☒ Trees: <u>10</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs			
Dominant Bank Vegetation (list): PINE, TULIP POPLAR, CEDAR, SYACMORE, BEECH, RED MAPLE, CHRISTMAS FERN, CHELONE				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOL003

^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.

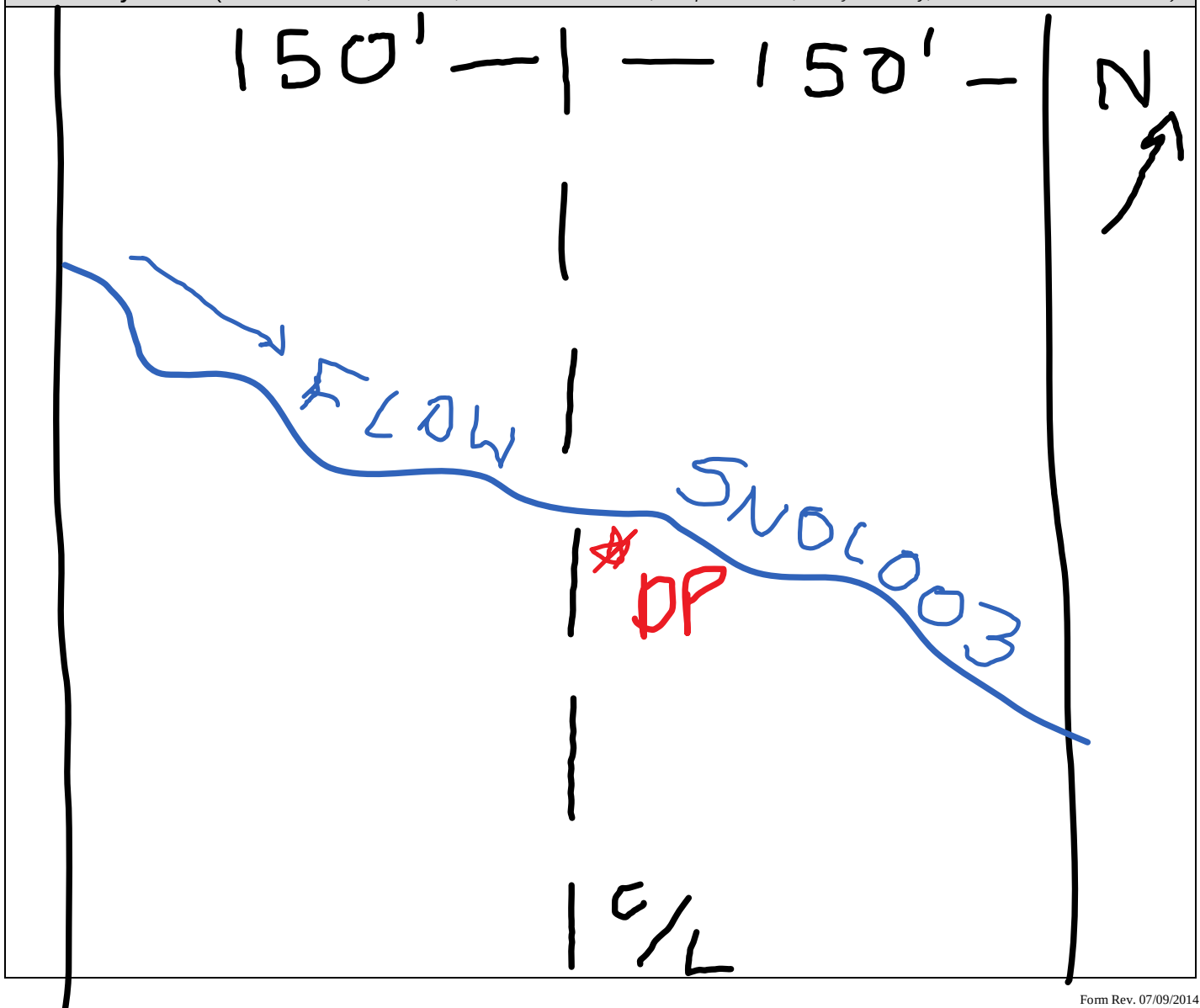
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

DRY HEADWATER INTERMITTENT STREAM

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





Waterbody point snol003 facing Southwest and upstream



Waterbody point snol003 facing Northeast and downstream



Waterbody point snol003 facing North and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: ATLANTIC COAST PIPELINE		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOL005
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: WLM, RMS
Tract Number(s): 12-021		Nearest Milepost: 228		Photos: 100-1140 TO 1142
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☐ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☐ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>10</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>3</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>2</u> ft.	Depth of Water: (Approx.) N/A ☐ <u>0.2</u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u>0.1</u> fps N/A ☐	Bank height Right: <u>4</u> ft. Left: <u>4</u> ft.	Bank slope Right: <u>55</u> degrees Left: <u>55</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other: % of Substrate: <u>NA</u> % <u>NA</u> % <u>10</u> % <u>25</u> % <u>60</u> % <u>NA</u> % <u>5</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>16</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs			
Dominant Bank Vegetation (list): SYCAMORE, PINUS, BEECH, RED MAPLE, N. RED OAK, SPICEBUSH, CHRISTMAS FERN, ATHYRIUM				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SOFT SAND/MUCK, RIFFLES, SMALL POOLS, CPOM				
Aquatic Organisms Observed (list): EPT				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOL005

^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.

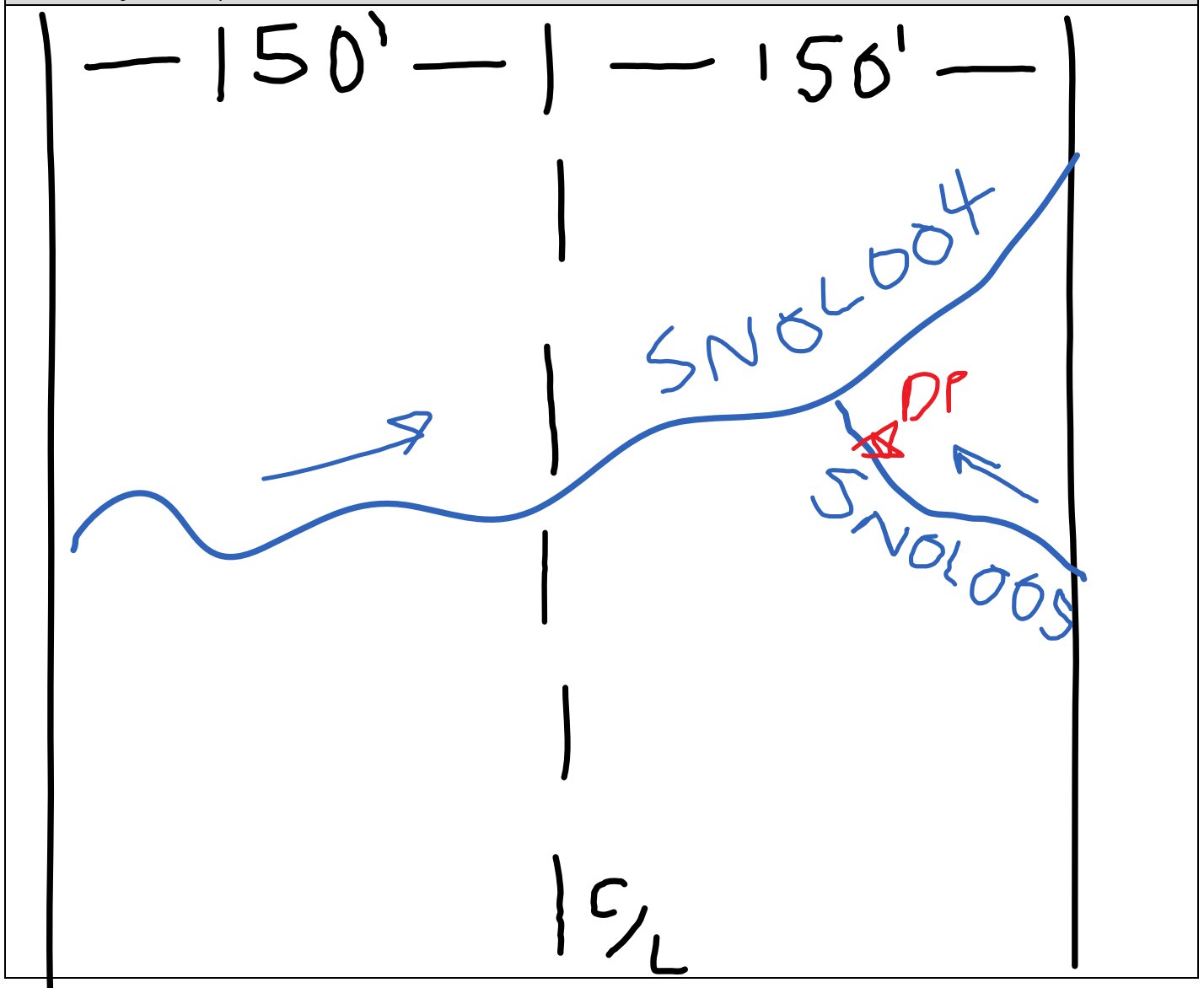
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

HIGH QUALITY HEADWATER PERENNIAL STREAM

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





Waterbody point snol005 facing Southwest and upstream



Waterbody point snol005 facing Northeast and downstream



Waterbody point snol005 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: ATLANTIC COAST PIPELINE		Waterbody Name: WEST CREEK		Waterbody ID: SNOL004
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: WLM, RMS
Tract Number(s): 12-021		Nearest Milepost: 228		Photos: 100-1137 TO 1139
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>6</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☐ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>16</u> ft.		Width of Waterbody - Toe of Slope to Toe of Slope: <u>6</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>3</u> ft.
Depth of Water: (Approx.) N/A ☐ <u>0.5</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>.8</u> fps N/A ☐		Bank height Right: <u>4</u> ft. Left: <u>3</u> ft.
Bank slope Right: <u>75</u> degrees Left: <u>75</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>10</u> % <u>30</u> % <u>60</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): PINE, TULIP POPLAR, N. RED OAK, BEECH, PAW PAW, SPICEBUSH, CHRISTMAS FERN				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): SOFT SANDY SEDIMENT, RIFFLES, SMALL POOLS, CPOM, LWD				
Aquatic Organisms Observed (list): FISH, CRAYFISH, EPT, HELLGRAMMITES				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOL004

^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.

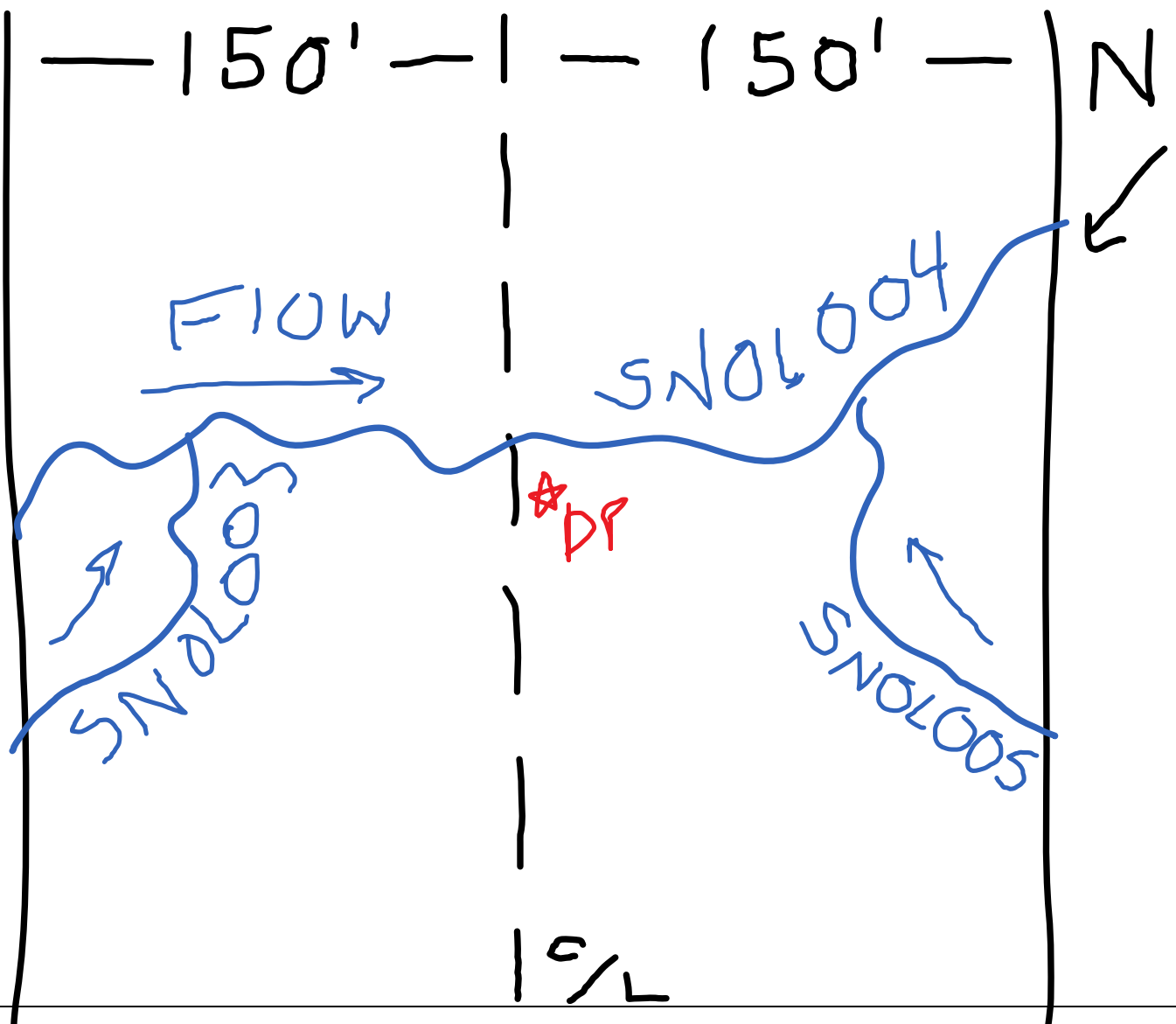
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

HIGH QUALITY PERENNIAL STREAM

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





Waterbody point snol004 facing North and upstream



Waterbody point snol004 facing South and downstream



Waterbody point snol004 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: ATLANTIC COAST PIPELINE		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOL006
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: WLM, RMS
Tract Number(s): 12-022		Nearest Milepost: 228		Photos: 100-1145 TO 1148
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>2</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☐ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
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>2</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☒ _____ ft.
Depth of Water: (Approx.) N/A ☒ _____ ft.				
Sinuosity: (check one) ☒ Straight ☐ Meandering		Water velocity: (Approx.) _____ fps N/A ☒		Bank height Right: <u>6</u> ft. Left: <u>9</u> ft.
Bank slope Right: <u>70</u> degrees Left: <u>85</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>2</u> % <u>2</u> % <u>36</u> % <u>60</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): BLACK OAK, TULIP POPLAR, WHITE OAK, BLACKGUM, CHRISTMAS FERN, BEECH				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOL006

^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.

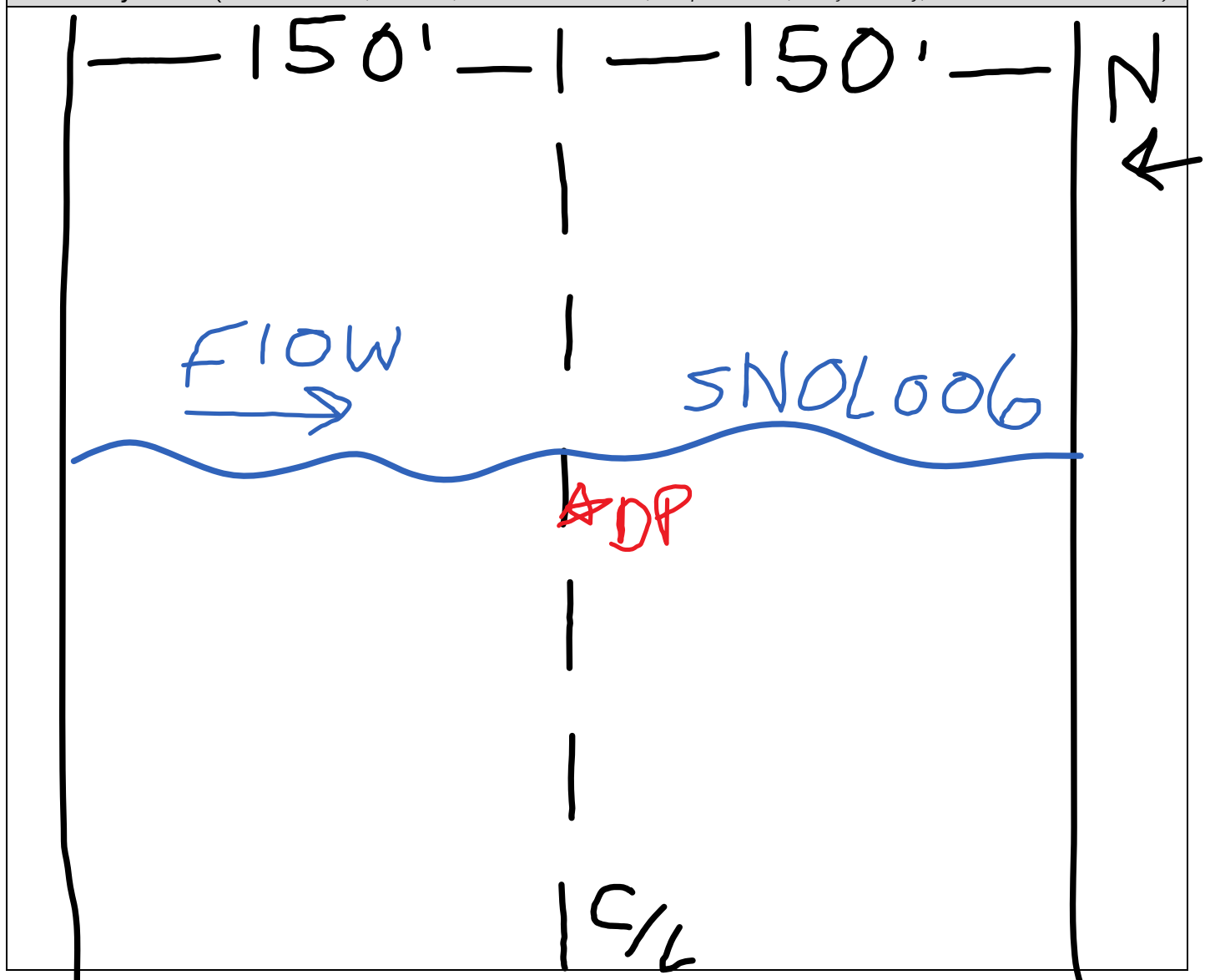
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

DRY EPHEMERAL STREAM; INCISED CHANNEL

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





Waterbody point snol006 facing North and upstream



Waterbody point snol006 facing South and downstream



Waterbody point snol006 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SnoI007
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: RS, WM
Tract Number(s): 12-026 AND 12-024		Nearest Milepost: 228		Photos: 100-1154 to 1156
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>2</u> ft. Height: <u>0.25</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☒ Scouring ☐ Water staining ☒ Bent, matted, or missing vegetation ☐ Wrack line ☐ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>12</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 ☐ <u>1.5</u> ft.
Depth of Water: (Approx.) N/A ☐ <u>0.1</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>1</u> fps N/A ☐		Bank height Right: <u>5</u> ft. Left: <u>3.5</u> ft.
Bank slope Right: <u>80</u> degrees Left: <u>50</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>10</u> % <u>60</u> % <u>NA</u> % <u>30</u> % <u>NA</u> %				
Width of Riparian Zone: <u>>100</u> ft. N/A ☐		Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): White oak, red maple, beech, poplar, fern, smilax				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Small pools, riffles, leaf packs, overhanging banks				
Aquatic Organisms Observed (list): Frog, dragonfly				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

Snol007

^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.

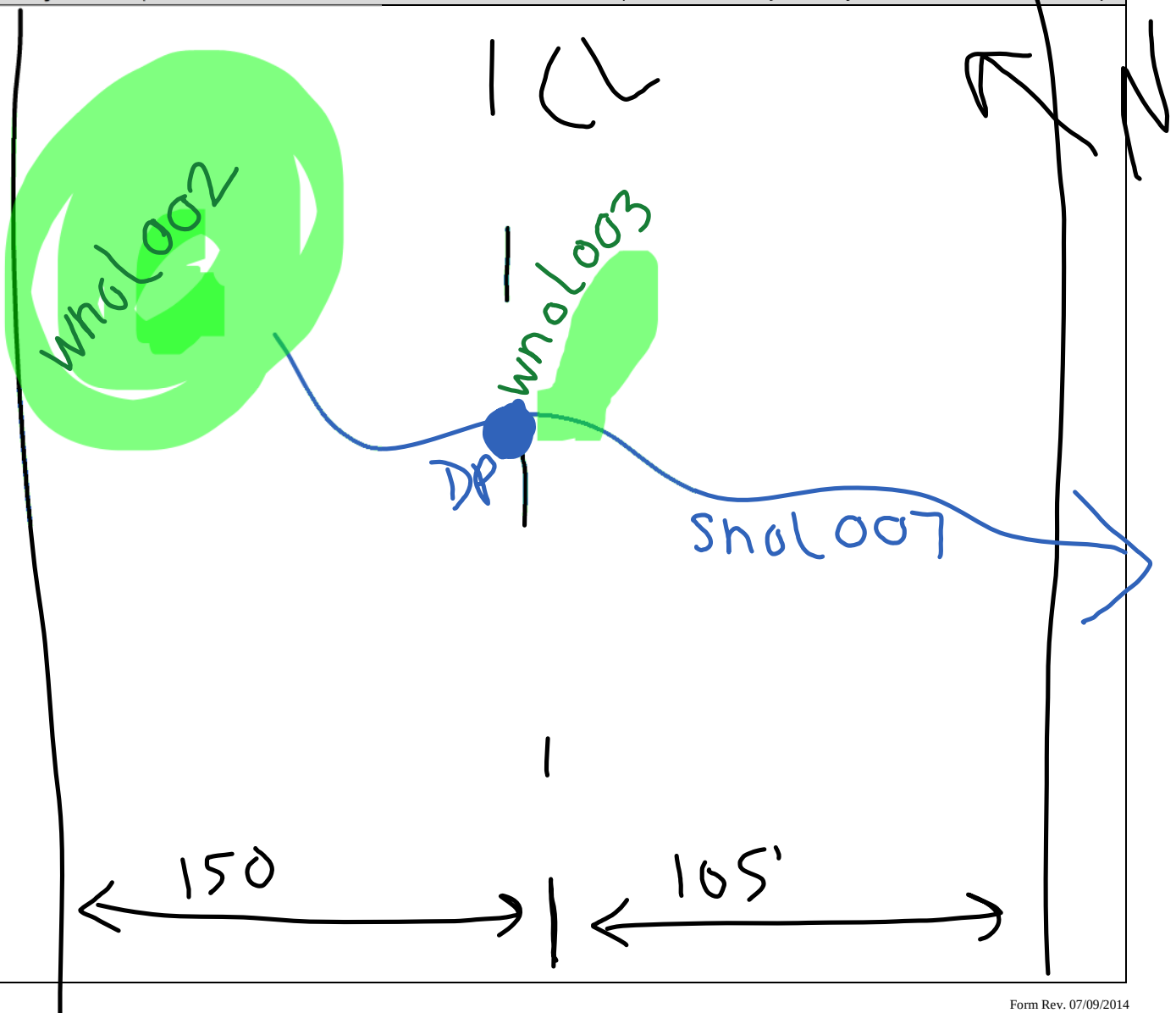
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

Small headwater perennial with adjacent seepage wetlands

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





Waterbody point snol007 facing South and downstream



Waterbody point snol007 facing North and upstream



Waterbody point snol007 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Atlantic Coast Pipeline		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOL008
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: RS, WM
Tract Number(s): 12-026		Nearest Milepost: 228		Photos: 3
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>4</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☐ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☒ Soil characteristic change		
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>4</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>3</u> ft.
Depth of Water: (Approx.) N/A ☐ <u>0.2</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0.1</u> fps N/A ☐		Bank height Right: <u>4</u> ft. Left: <u>4</u> ft.
Bank slope Right: <u>35</u> degrees Left: <u>30</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☒ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☒ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>10</u> % <u>NA</u> % <u>NA</u> % <u>10</u> % <u>70</u> % <u>5</u> % <u>5</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>3</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): BEECH, HICKORY, TULIP POPLAR, ELM, CHRISTMAS FERN, ATHYRIUM				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOL008

^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.

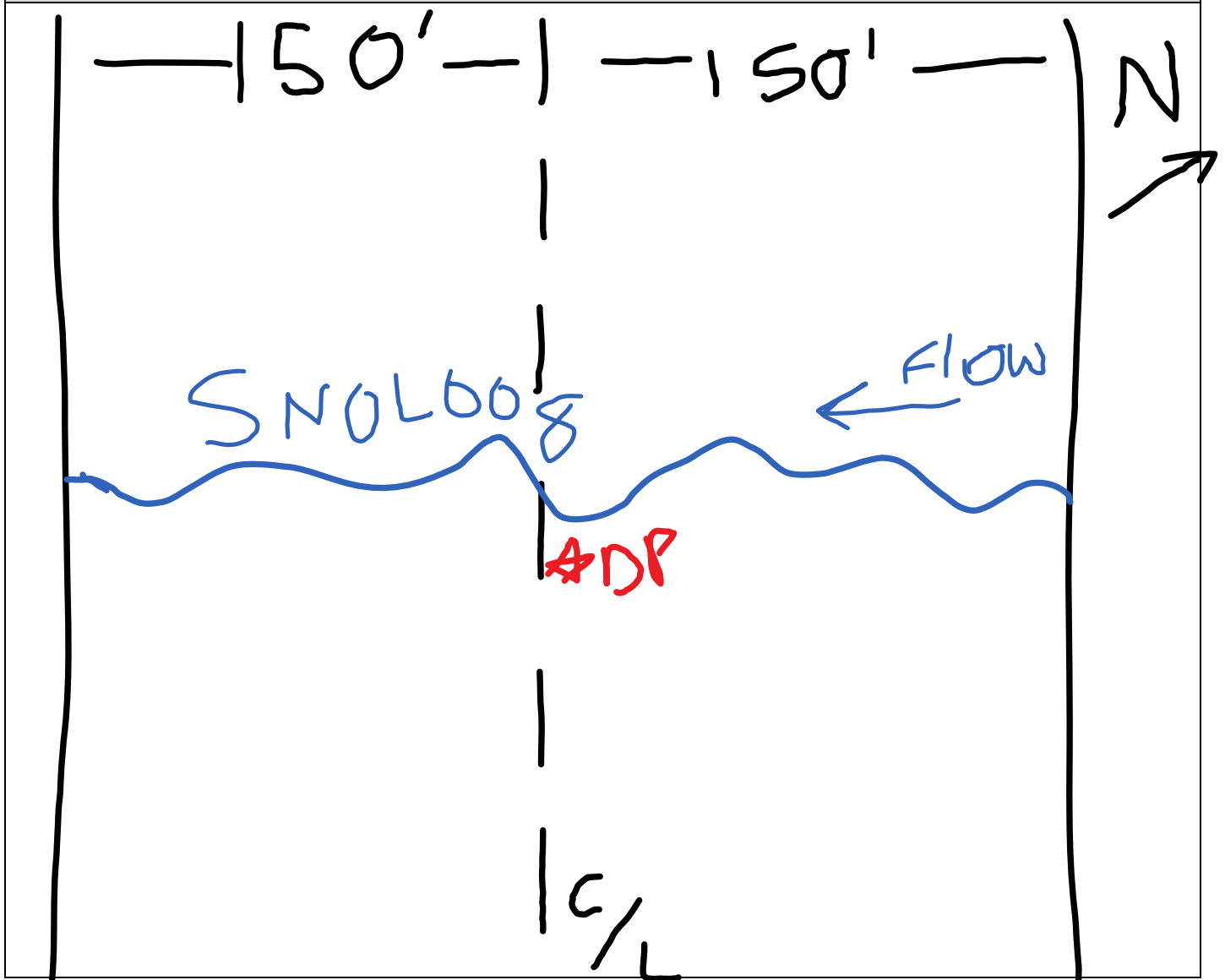
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

GOOD QUALITY STREAM WUTH SEEPY STREAMBANKS

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





Waterbody point snol008 facing North and upstream



Waterbody point snol008 facing South and downstream



Waterbody point snol008 facing West and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOK021
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5011 TO 5013
Associated Wetland ID(s): WNOK017				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>4</u> ft. Height: <u>0.5</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☐ Scouring ☒ Water staining ☒ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ 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>4</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>3</u> ft.
Depth of Water: (Approx.) N/A ☐ <u>0.1</u> ft.				
Sinuosity: (check one) ☒ Straight ☐ Meandering		Water velocity: (Approx.) <u>0.1</u> fps N/A ☐		Bank height Right: <u>2</u> ft. Left: <u>2</u> ft.
Bank slope Right: <u>80</u> degrees Left: <u>80</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☐ Clear ☒ Turbid ☒ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand ☒ Silt/ clay ☐ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>100</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>15</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CHRISTMAS FERN, MOSS, MULTIFLORA ROSE				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): CRAYFISH				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): MODIFIED CHANNEL				
Tributary is: (check one) ☐ Natural ☐ Artificial, man-made ☒ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOK021

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

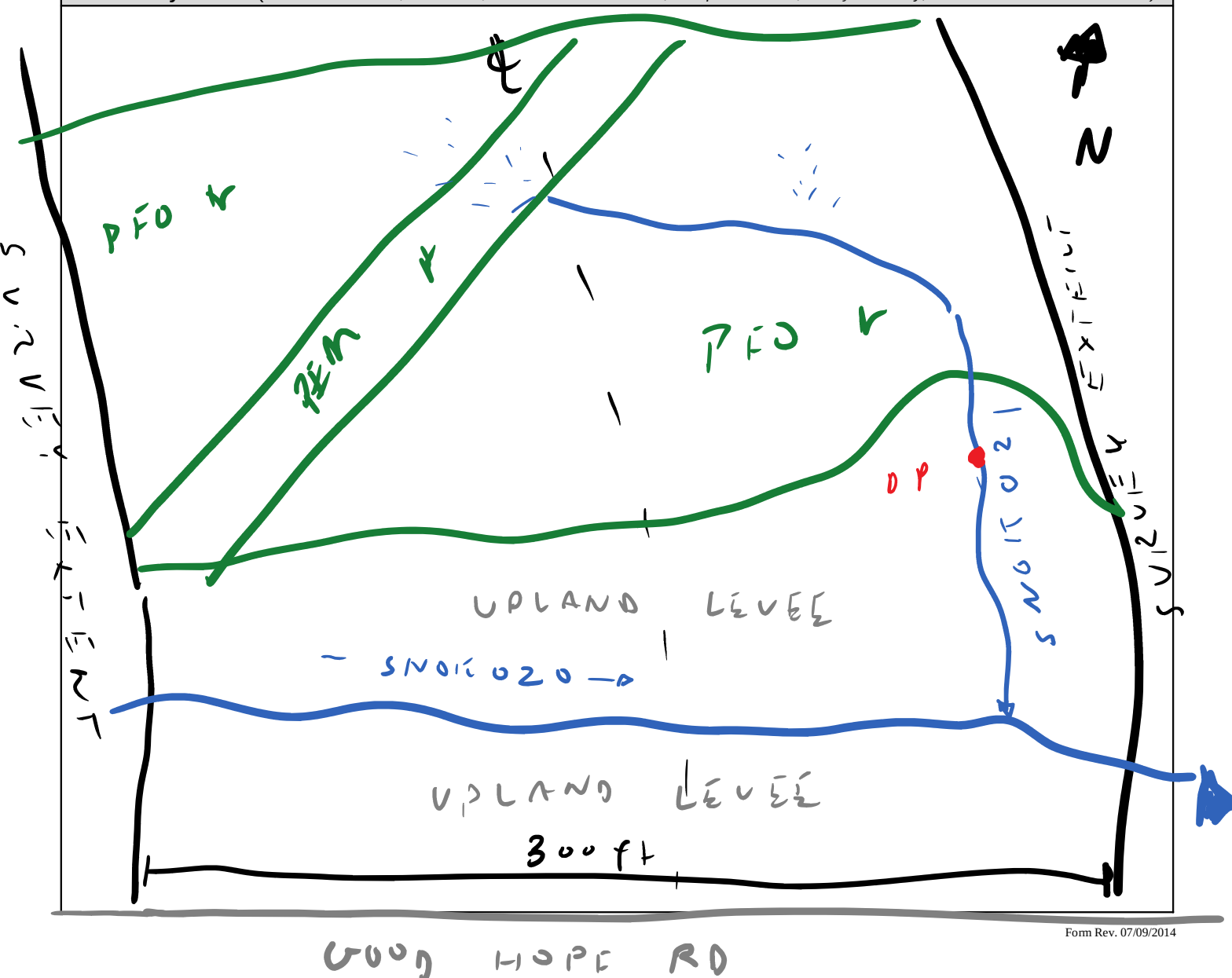
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

INTERMITTENT STREAM THAT HAS BEEN PARTALLY DITCHED THROUGH WETLAND WNOK017. FLOWS INTO WEST CREEK.

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





Waterbody point snok021 facing Northwest and upstream



Waterbody point snok021 facing Southeast and downstream



Waterbody point snok021 facing North and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: WEST CREEK		Waterbody ID: SNOK020
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5008 TO 5010
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☐ Intermittent ☒ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>10</u> ft. Height: <u>2</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☐ Wrested vegetation ☒ Scouring ☐ Water staining ☒ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ 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>10</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>6</u> ft.	Depth of Water: (Approx.) N/A ☐ <u>0.5</u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u>1</u> fps N/A ☐	Bank height Right: <u>6</u> ft. Left: <u>6</u> ft.	Bank slope Right: <u>70</u> degrees Left: <u>80</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☐ Organic ☐ Other: % of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>40</u> % <u>60</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>50</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>15</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs Avg. DBH of Dominants: (approx.)			
Dominant Bank Vegetation (list): ELM,RED MAPLE,RIVER BIRCH,SMILAX,GRASSES,FERNS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): UNDERCUT BANKS, RIFFLE/POOL COMPLEX, SOFT SANDY SEDIMENT, CWD, OVERHANGING VEG, ROOTMATS				
Aquatic Organisms Observed (list): FISH, FROGS, WATER STRIDERS,WHIRLYGIG BEETLES				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): GOOD HOPE ROAD IN RIPARIAN ZONE				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK020

^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.

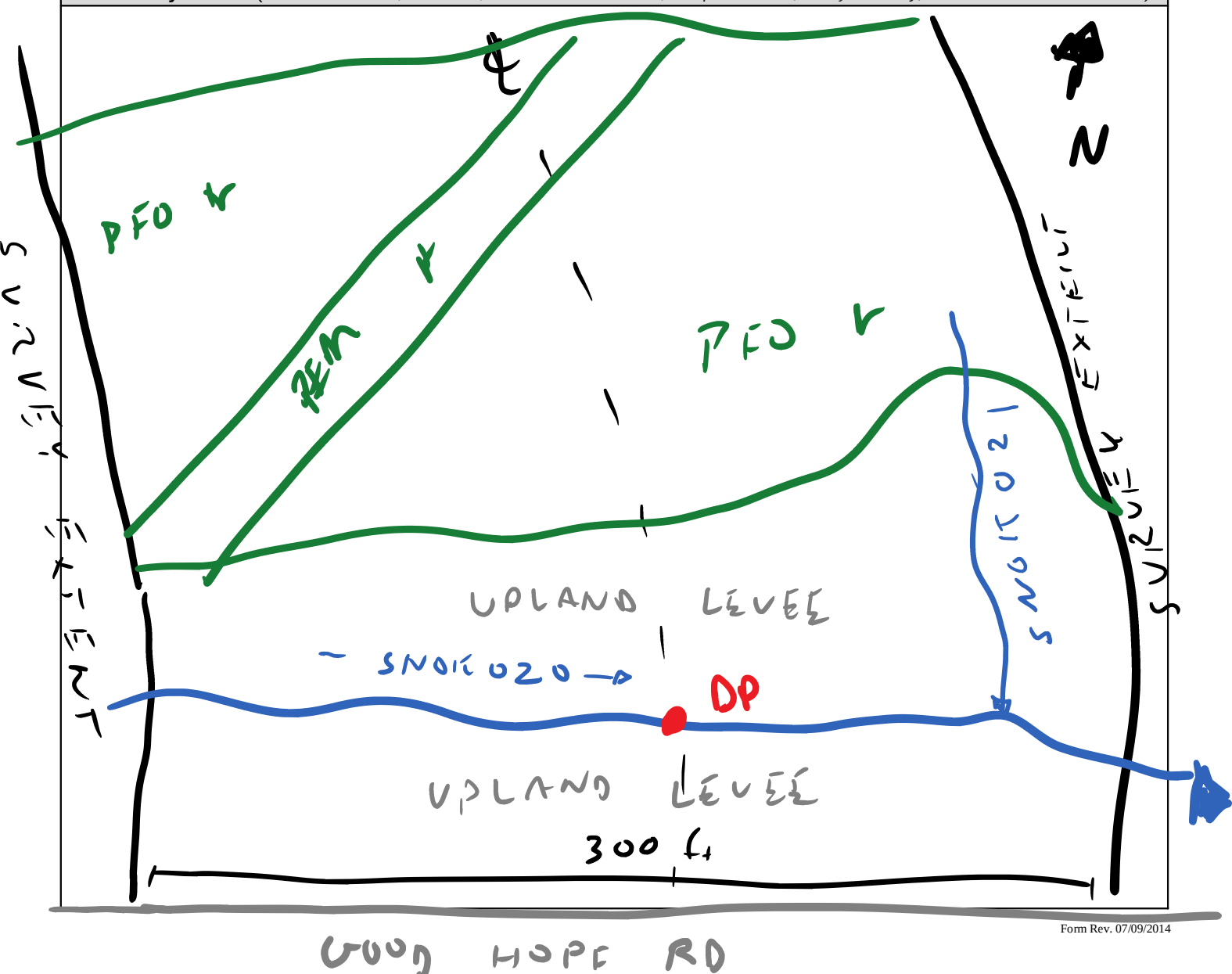
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

PERENNIAL STREAM, SOME BANK EROSION AND SEDIMENTATION, TYPICAL PIEDMONT SMALL STREAM FOREST COMMUNITY. WELL CONNECTED TO FLOODPLAIN.

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





Waterbody point snok020 facing West and upstream



Waterbody point snok020 facing East and downstream



Waterbody point snok020 facing Northwest and
across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOK022
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5014 TO 5016
Associated Wetland ID(s): WNOK018				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>1</u> ft. Height: <u>0.2</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☐ Scouring ☐ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ 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>10</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>1</u> ft.	Depth of Water: (Approx.) N/A ☐ <u>0.1</u> ft.	
Sinuosity: (check one) ☒ Straight ☐ Meandering	Water velocity: (Approx.) <u>0.1</u> fps N/A ☐	Bank height Right: <u>6</u> ft. Left: <u>6</u> ft.	Bank slope Right: <u>40</u> degrees Left: <u>40</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☐ Clear ☒ Turbid ☒ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>80</u> % <u>NA</u> % <u>20</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>0</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs			
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CAREX, ELM, SPICEBUSH, SWEETGUM				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): COARSE WOODY DEBRIS				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): CULVERTED UNDER GOOD HOPE ROAD, DUMPING NOTED ON UPLINE SIDE OF ROAD.				
Tributary is: (check one) ☐ Natural ☐ Artificial, man-made ☒ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

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

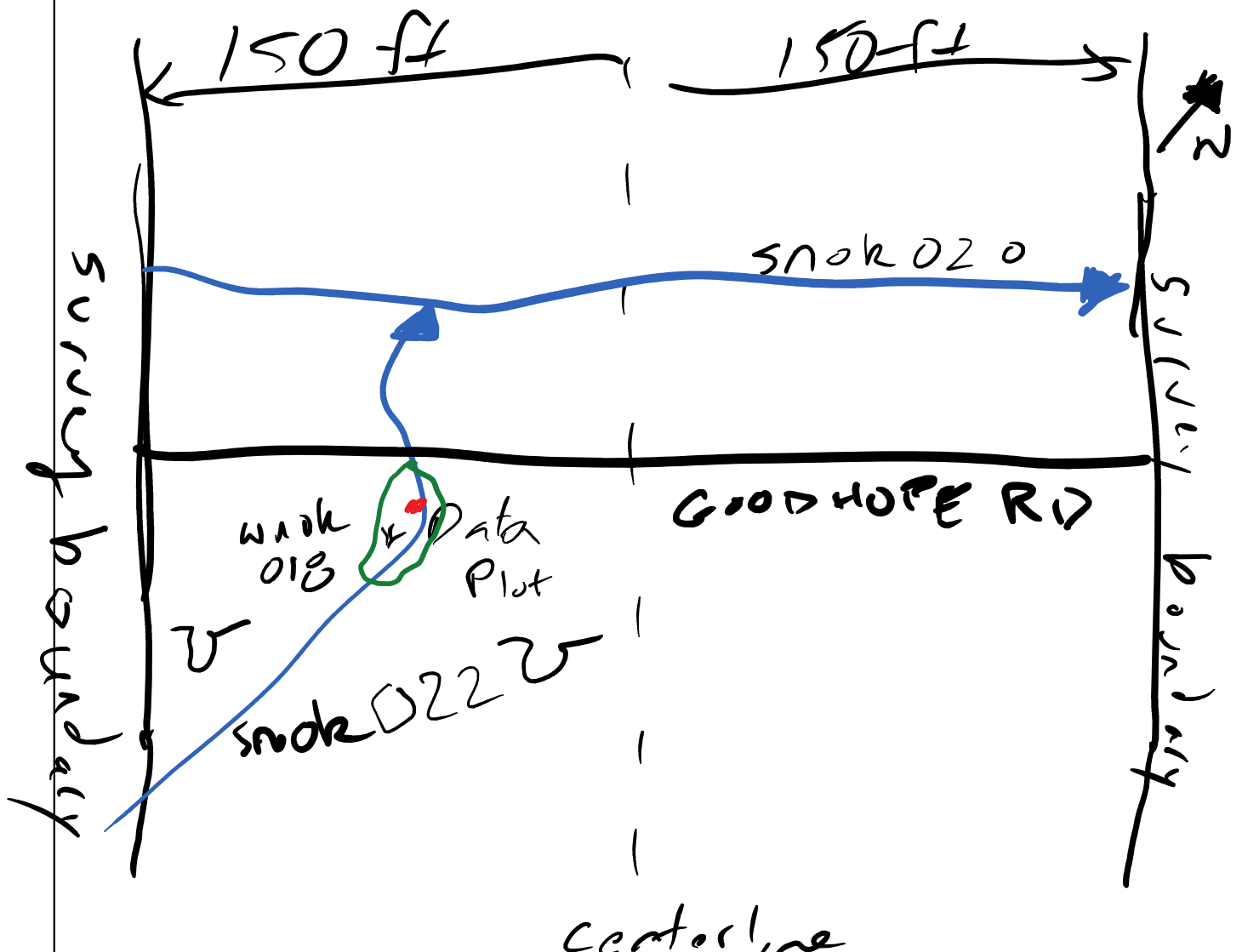
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

SMALL INTERMITTENT STREAM, VERY LITTLE FLOWING WATER, PROMINENT HUMAN LITTER IN CHANNEL, CULVERTED UNDER GOOD HOPE ROAD

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





Waterbody point snok022 facing Southeast and upstream



Waterbody point snok022 facing Northwest and downstream



Waterbody point snok022 facing West and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOK024
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5030 TO 5032
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>1</u> ft. Height: <u>0.5</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☐ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☐ Wrack line ☐ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>5</u> ft.	Width of Waterbody - Toe of Slope to Toe of Slope: <u>3</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☒ <u>0</u> ft.	Depth of Water: (Approx.) N/A ☒ <u>0</u> ft.	
Sinuosity: (check one) ☒ Straight ☐ Meandering	Water velocity: (Approx.) <u>0</u> fps N/A ☒	Bank height Right: <u>3</u> ft. Left: <u>3</u> ft.	Bank slope Right: <u>80</u> degrees Left: <u>80</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☒ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other: % of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>20</u> % <u>40</u> % <u>NA</u> % <u>40</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs Avg. DBH of Dominants: (approx.)			
Dominant Bank Vegetation (list): CHRISTMAS FERN, MOSS, CAREX SP.				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOK024

^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.

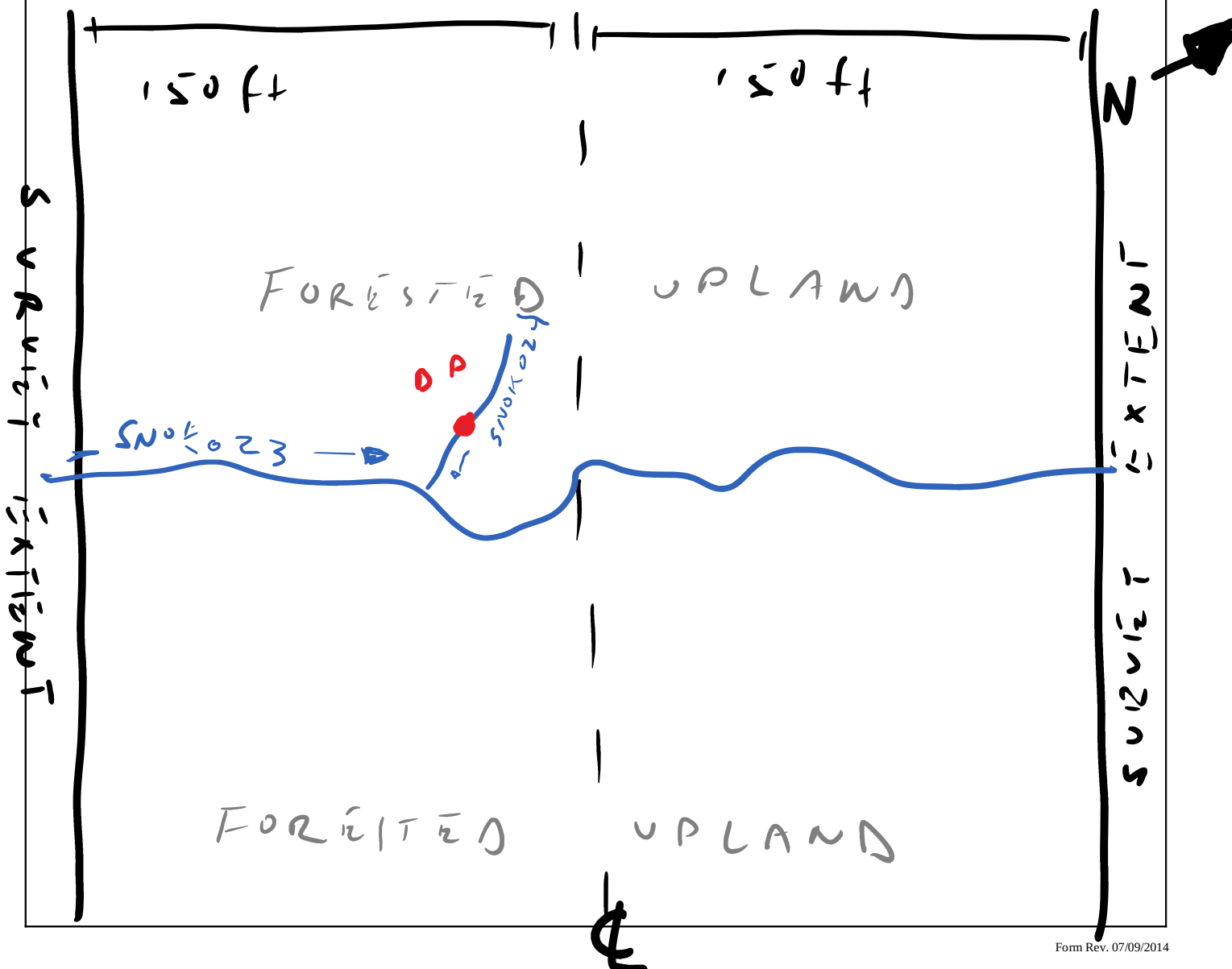
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

VERY SHORT SECTION OF EPHEMERAL STREAM THAT FLOWS INTO STREAM SNOK023.

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





Waterbody point snok024 facing West and upstream



Waterbody point snok024 facing East and downstream



Waterbody point snok024 facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOK023
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5027 TO 5029
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining ☒ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☒ Abrupt plant community change ☐ Soil characteristic change		
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>3</u> ft.	Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>1</u> ft.	Depth of Water: (Approx.) N/A ☐ <u>0.1</u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u>0.1</u> fps N/A ☐	Bank height Right: <u>4</u> ft. Left: <u>3</u> ft.	Bank slope Right: <u>110</u> degrees Left: <u>110</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☒ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other: % of Substrate: <u>NA</u> % <u>NA</u> % <u>10</u> % <u>40</u> % <u>40</u> % <u>NA</u> % <u>10</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>12</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs			
Dominant Bank Vegetation (list): CHRISTMAS FERN, MOSS, CAREX SP.				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): RIFFLE/POOL COMPLEX, UNDERCUT BANKS, LEAF PACK, CWD				
Aquatic Organisms Observed (list): CRAYFISH, CADDISFLY, MAYFLY				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☒ High ☐ Moderate ☐ Low				

Waterbody ID:

SNOK023

^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.

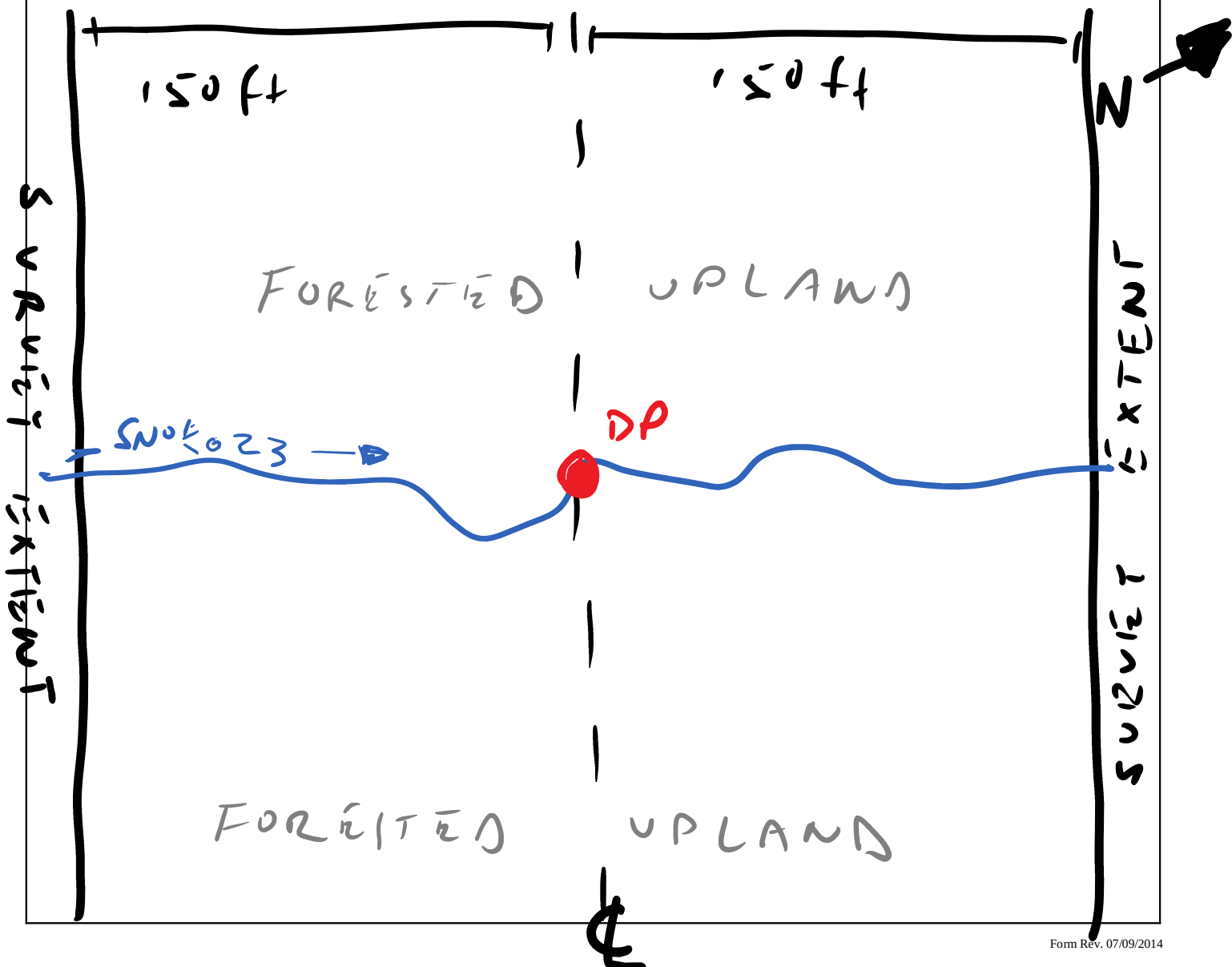
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

SMALL INTERMITTENT STREAM IN FORESTED LANDSCAPE. GOOD SINUOSITY. LOW FLOW AND VOLUME AT TIME OF SURVEY.

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





Waterbody point snok023 facing South and upstream



Waterbody point snok023 facing North and downstream



Waterbody point snok023 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO LITTLE WEST CREEK		Waterbody ID: SNOK026a
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5036 TO 5038
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>20</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 ☒ <u>0</u> ft.	Depth of Water: (Approx.) N/A ☒ <u>0</u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u>0</u> fps N/A ☒	Bank height Right: <u>8</u> ft. Left: <u>6</u> ft.	Bank slope Right: <u>70</u> degrees Left: <u>60</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>20</u> % <u>20</u> % <u>NA</u> % <u>60</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs			
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, SWEET GUM, RED MAPLE, MOSS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOK026a

^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.

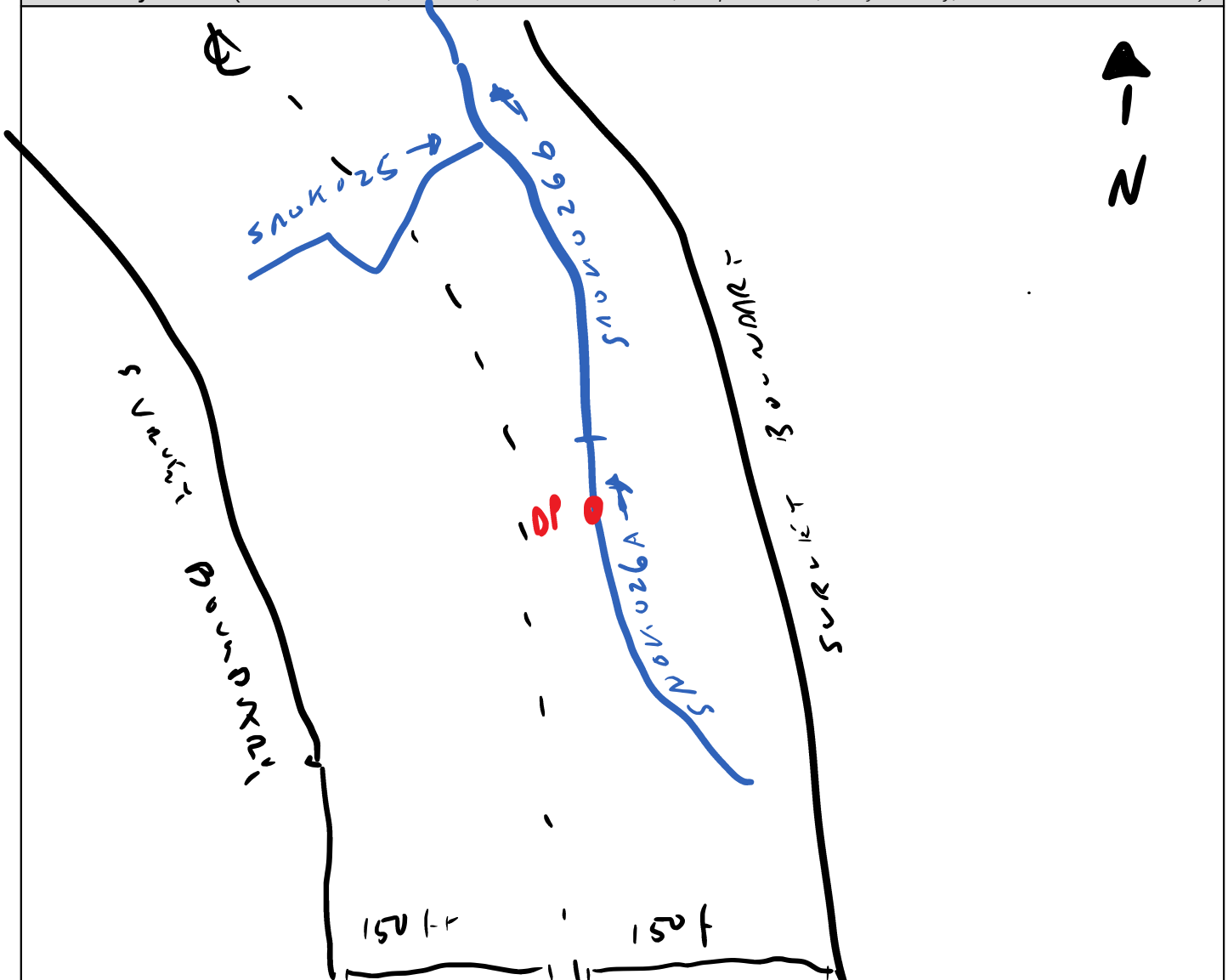
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

EPHEMERAL STREAM WITH SIGNS OF TORRENT. LOW QUALITY STREAM DUE TO LACK OF AQUATIC HABITATS. PORTION OF LONGER REACH.

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





Waterbody point snok026a facing Southeast and upstream



Waterbody point snok026a facing Northwest and downstream



Waterbody point snok026a facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO LITTLE WEST CREEK		Waterbody ID: SNOK026b
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5039 TO 5041
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>5</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>12</u> ft.		Width of Waterbody - Toe of Slope to Toe of Slope: <u>5</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>2</u> ft.
Depth of Water: (Approx.) N/A ☒ <u>0.1</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0.1</u> fps N/A ☐		Bank height Right: <u>4</u> ft. Left: <u>8</u> ft.
Bank slope Right: <u>70</u> degrees Left: <u>90</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>45</u> % <u>45</u> % <u>NA</u> % <u>10</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, SWEET GUM, RED MAPLE, MOSS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): RIFFLE/POOL, LEAF PACK, CWD, UNDERCUT BANKS, PLUNGE POOL				
Aquatic Organisms Observed (list): FROGS, CRAYFISH				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☐ Natural ☐ Artificial, man-made ☒ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK026b

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

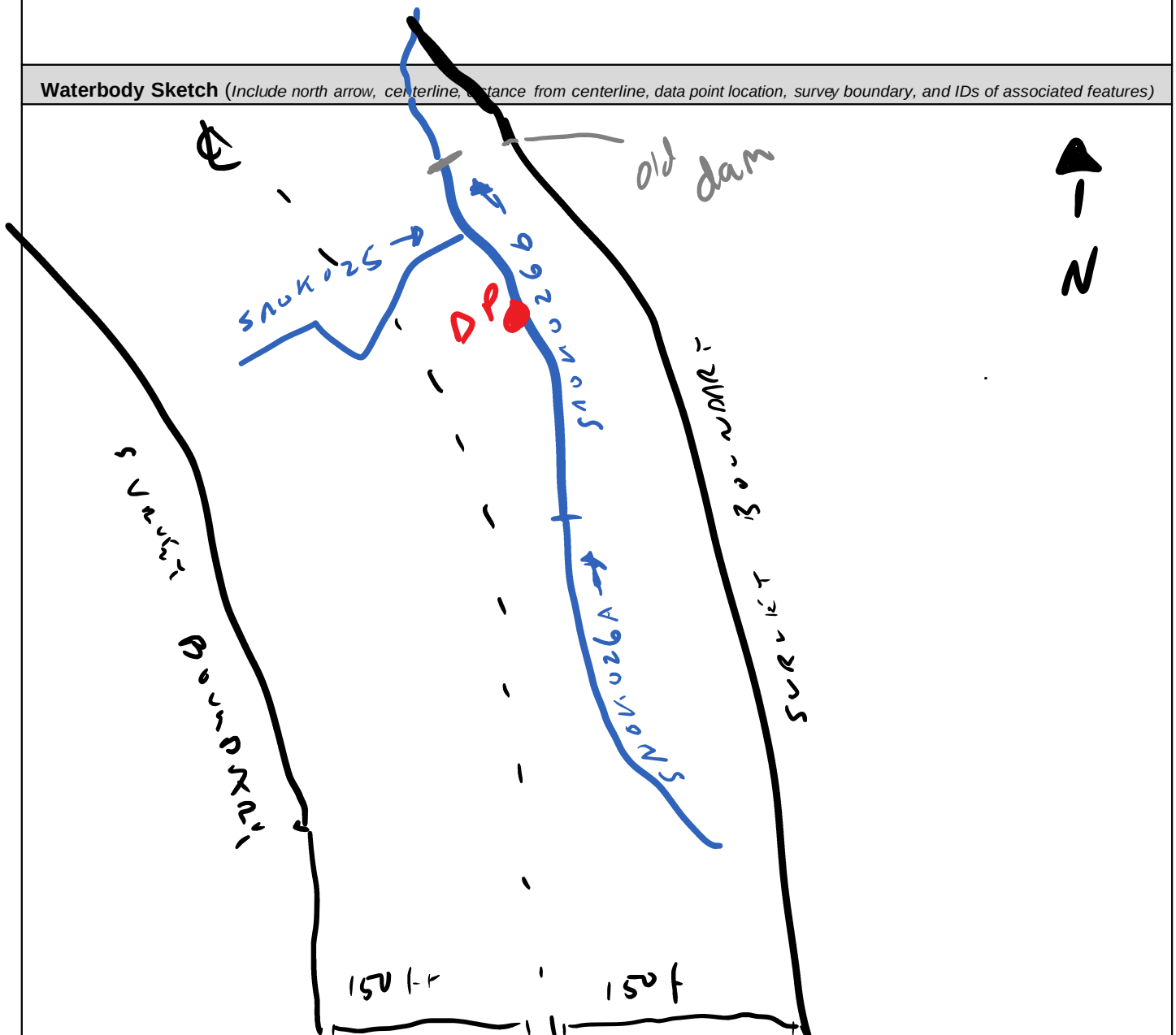
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

INTERMITTENT STREAM PORTION. OLD DAM PRESENT DOWN STREAM OF CONFLUENCE WITH SNOK025. INTERMITTENT PORTION STARTS AT HEADCUT AND SPRING SEEP.

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





Waterbody point snok026b facing Southeast and upstream



Waterbody point snok026b facing Northwest and downstream



Waterbody point snok026b facing West and across



Waterbody point snok026b old dam facing Northwest

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO WEST CREEK		Waterbody ID: SNOK025
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5033 TO 5035
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ 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>4</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☒ <u>0</u> ft.
Depth of Water: (Approx.) N/A ☒ <u>0</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0</u> fps N/A ☒		Bank height Right: <u>10</u> ft. Left: <u>10</u> ft.
Bank slope Right: <u>80</u> degrees Left: <u>80</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>40</u> % <u>40</u> % <u>NA</u> % <u>20</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, SWEET GUM, MOSS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOK025

^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.

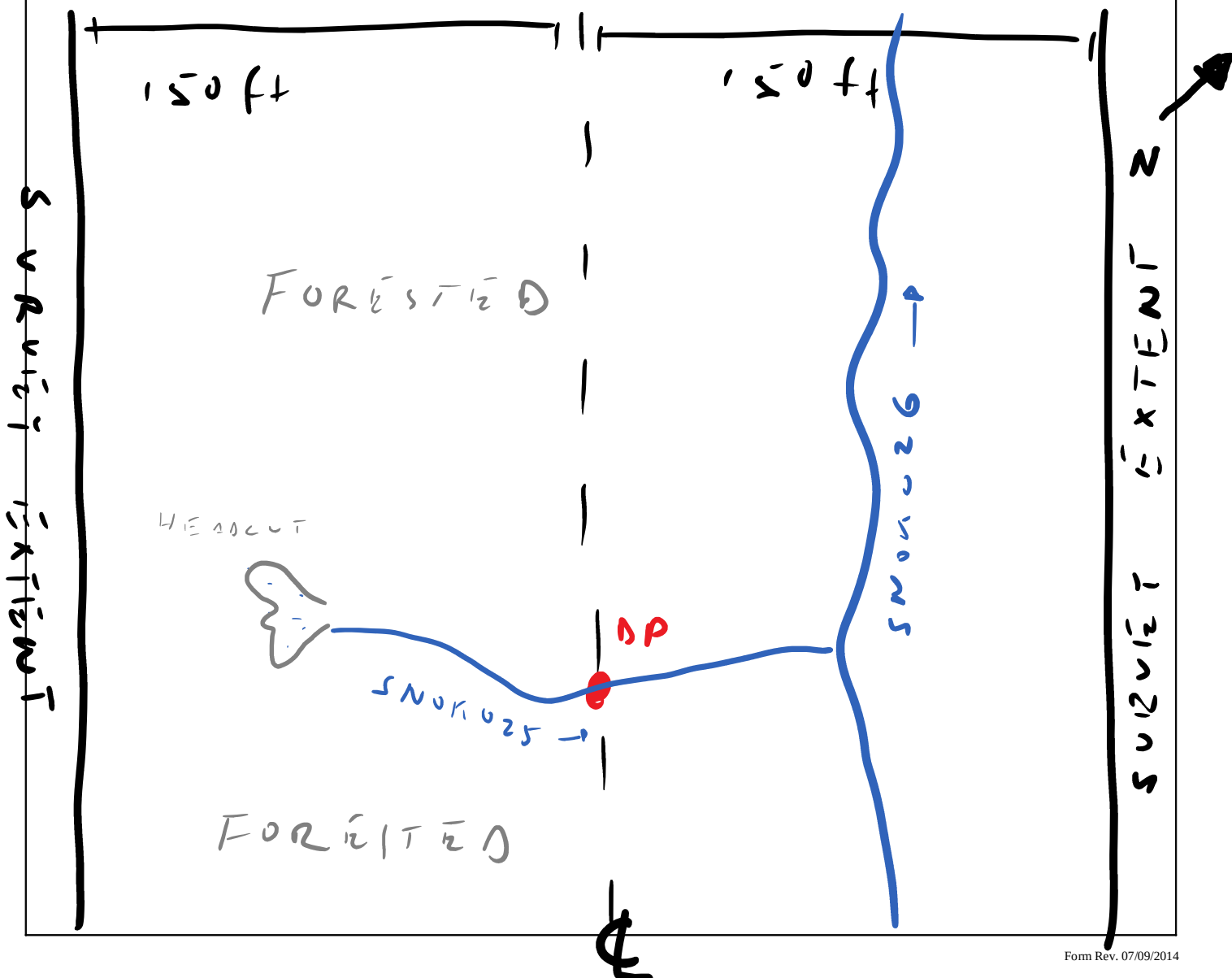
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

EPHEMERAL STREAM WITH SIGNS OF TORRENT. LOW QUALITY STREAM DUE TO LACK OF AQUATIC HABITATS.

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





Waterbody point snok025 facing South and upstream



Waterbody point snok025 facing North and downstream



Waterbody point snok025 facing East and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO LITTLE WEST CREEK		Waterbody ID: SNOK026a
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5036 TO 5038
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☒ Ephemeral ☐ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>3</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☐ Shelving ☐ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>20</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 ☒ <u>0</u> ft.	Depth of Water: (Approx.) N/A ☒ <u>0</u> ft.	
Sinuosity: (check one) ☐ Straight ☒ Meandering	Water velocity: (Approx.) <u>0</u> fps N/A ☒	Bank height Right: <u>8</u> ft. Left: <u>6</u> ft.	Bank slope Right: <u>70</u> degrees Left: <u>60</u> degrees	
Qualitative Attributes				
Water Appearance: (check one) ☒ No water ☐ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other: % of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>20</u> % <u>20</u> % <u>NA</u> % <u>60</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.	Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs Avg. DBH of Dominants: (approx.)			
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, SWEET GUM, RED MAPLE, MOSS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): NA				
Aquatic Organisms Observed (list): NA				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☒ Natural ☐ Artificial, man-made ☐ Manipulated				
Stream Quality ^a : (check one) ☐ High ☐ Moderate ☒ Low				

Waterbody ID:

SNOK026a

^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.

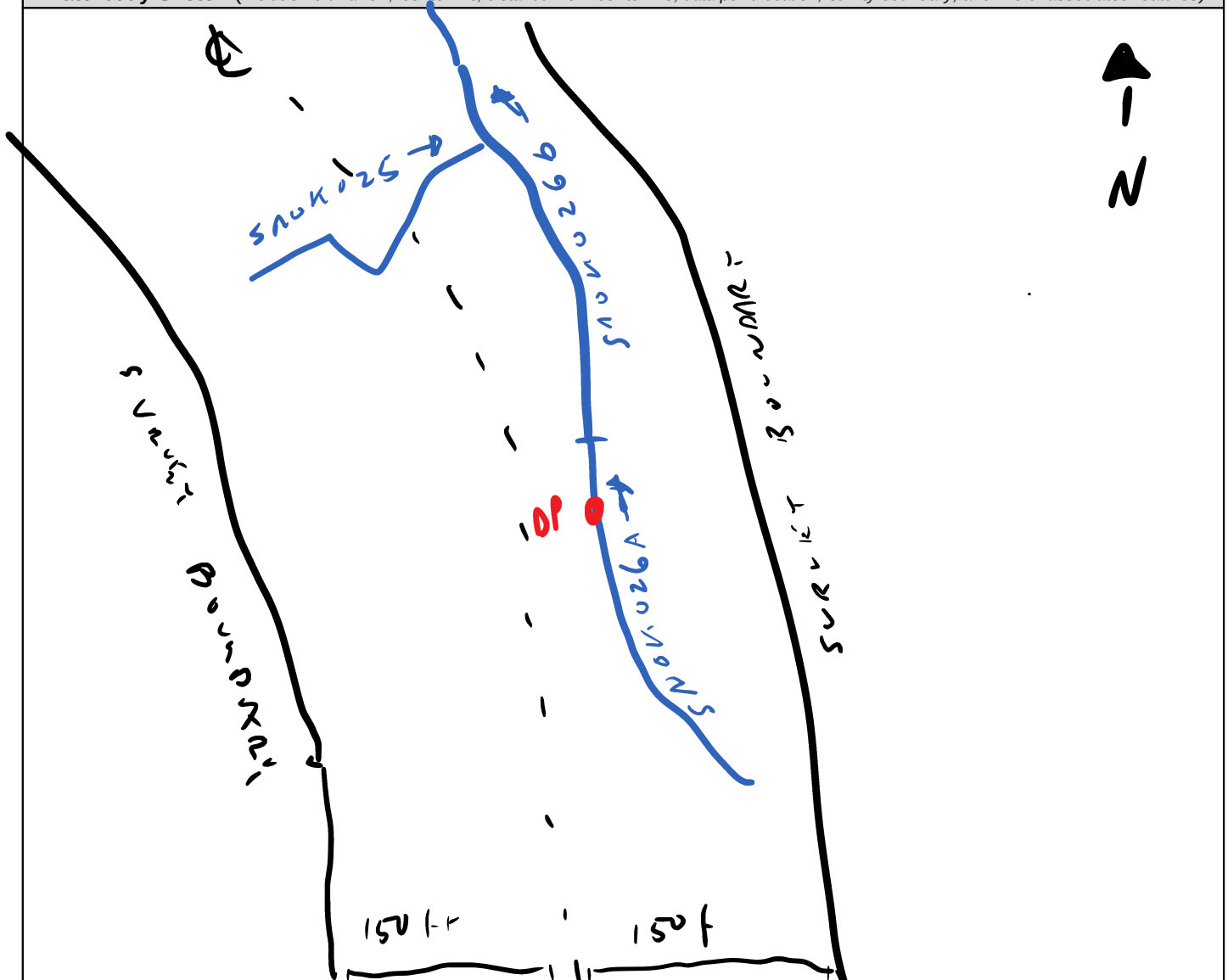
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

EPHEMERAL STREAM WITH SIGNS OF TORRENT. LOW QUALITY STREAM DUE TO LACK OF AQUATIC HABITATS. PORTION OF LONGER REACH.

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





Waterbody point snok026a facing Southeast and upstream



Waterbody point snok026a facing Northwest and downstream



Waterbody point snok026a facing South and across

Linear Waterbody Data Sheet

Survey Description				
Project Name: Southeast Reliability		Waterbody Name: UNT TO LITTLE WEST CREEK		Waterbody ID: SNOK026b
State: Virginia		County: Nottoway	Company: W&C	Crew Member Initials: JS,BG
Tract Number(s): 12-027		Nearest Milepost: 229		Photos: 106-5039 TO 5041
Associated Wetland ID(s): NA				
Survey Type: (check one) ☒ Centerline ☐ Re-Route ☐ Access Road ☐ Other:				
Physical Attributes				
Stream Classification: (check one) ☐ Ephemeral ☒ Intermittent ☐ Perennial				
Waterbody Type: (check one) ☐ River ☒ Stream ☐ Ditch ☐ Canal ☐ Other:				
OHWM Width: <u>5</u> ft. Height: <u>1</u> ft. N/A ☐		OHWM Indicator: (check all that apply) ☒ Clear line on bank ☒ Shelving ☒ Wrested vegetation ☒ Scouring ☒ Water staining ☐ Bent, matted, or missing vegetation ☒ Wrack line ☒ Litter and debris ☐ Abrupt plant community change ☐ Soil characteristic change		
Width of Waterbody - Top of Bank to Top of Bank: <u>12</u> ft.		Width of Waterbody - Toe of Slope to Toe of Slope: <u>5</u> ft.		Width of Waterbody - Water Edge to Water Edge: N/A ☐ <u>2</u> ft.
Depth of Water: (Approx.) N/A ☒ <u>0.1</u> ft.				
Sinuosity: (check one) ☐ Straight ☒ Meandering		Water velocity: (Approx.) <u>0.1</u> fps N/A ☐		Bank height Right: <u>4</u> ft. Left: <u>8</u> ft.
Bank slope Right: <u>70</u> degrees Left: <u>90</u> degrees				
Qualitative Attributes				
Water Appearance: (check one) ☐ No water ☒ Clear ☐ Turbid ☐ Sheen on surface ☐ Surface scum ☐ Algal mats ☐ Other:				
Substrate: (check all that apply) ☐ Bedrock ☐ Boulder ☐ Cobble ☒ Gravel ☒ Sand ☐ Silt/ clay ☒ Organic ☐ Other:				
% of Substrate: <u>NA</u> % <u>NA</u> % <u>NA</u> % <u>45</u> % <u>45</u> % <u>NA</u> % <u>10</u> % <u>NA</u> %				
Width of Riparian Zone: N/A ☐ <u>100</u> ft.		Vegetative Layers: (check all that apply) ☒ Trees: <u>14</u> in. ☒ Saplings/Shrubs: <u>2</u> in. ☒ Herbs		
Avg. DBH of Dominants: (approx.)				
Dominant Bank Vegetation (list): CHRISTMAS FERN, TULIP POPLAR, SWEET GUM, RED MAPLE, MOSS				
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): RIFFLE/POOL, LEAF PACK, CWD, UNDERCUT BANKS, PLUNGE POOL				
Aquatic Organisms Observed (list): FROGS, CRAYFISH				
T&E Species Observed (list): NA				
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): NA				
Tributary is: (check one) ☐ Natural ☐ Artificial, man-made ☒ Manipulated				
Stream Quality ^a : (check one) ☐ High ☒ Moderate ☐ Low				

Waterbody ID:

SNOK026b

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

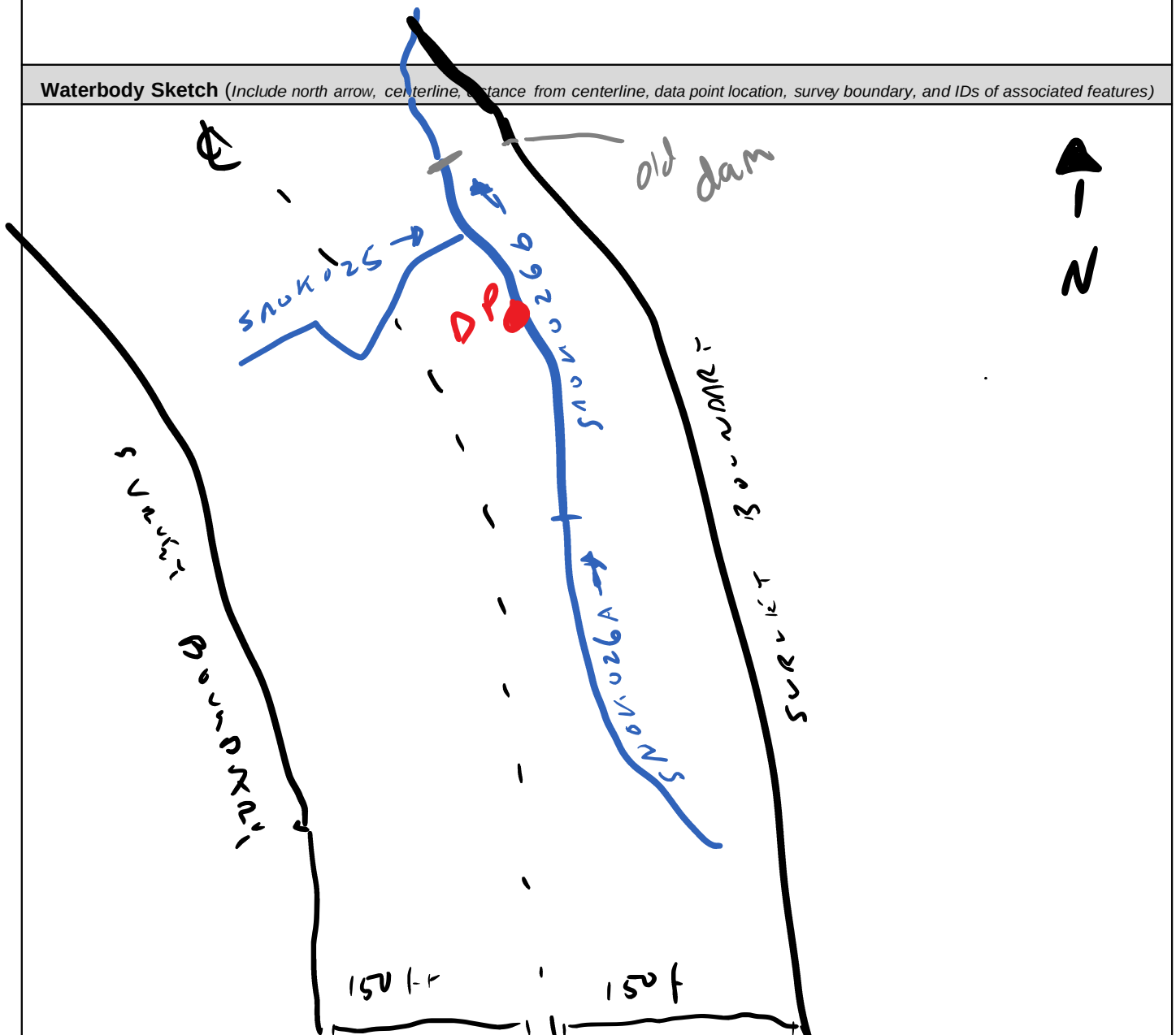
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

INTERMITTENT STREAM PORTION. OLD DAM PRESENT DOWN STREAM OF CONFLUENCE WITH SNOK025. INTERMITTENT PORTION STARTS AT HEADCUT AND SPRING SEEP.

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





Waterbody point snok026b facing Southeast and upstream



Waterbody point snok026b facing Northwest and downstream