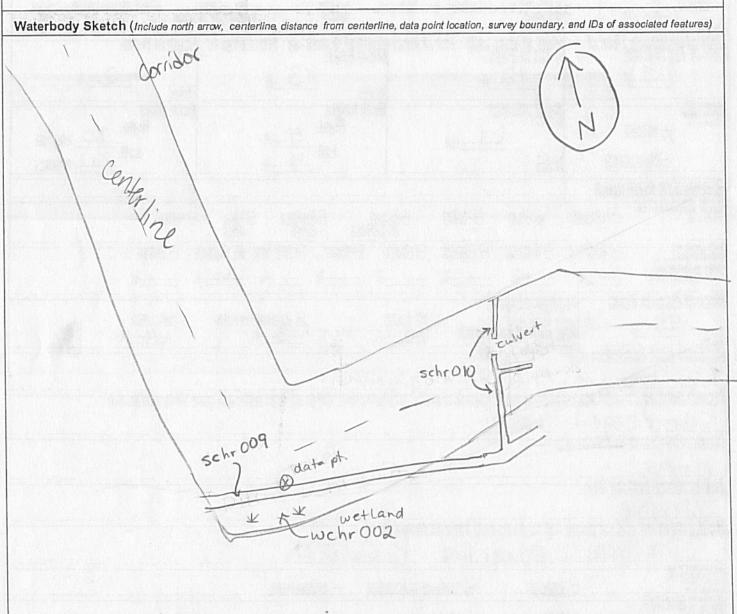
Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Date: Project Name: schr 009 21 Jan 2016 Crew Member Initials: Photos: County/Parish: State: Company: NW, SE esapeake CSM Nearest Milepost: Associated Wetland ID(s): Tract Number(s): wchr 002 001-Survey Type: Centerline (check one) □Re-Route ☐ Access Road Other: Physical Attributes Stream Classification: (check one) Perennial □ Ephemeral □Intermittent Waterbody Type: Ditch (check one) □River ☐ Stream ☐ Canal ☐ Other: OHWM **OHWM Indicator:** W ater staining □ Shelving (check all that apply) M Clear line □Wrested □ Scouring Width: on bank vegetation Height: □Bent, matted, or missing □Wrack line □ Litter and □Soil characteristic change ☐ Abrupt plant community change vegetation debris N/A Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Depth of Water: (Approx.) Bank to Top of Bank: to Toe of Slope: Water Edge: 2 N/A N/A Sinuosity: Water velocity: Bank height Bank slope (check one) (Approx.) Right: Straight degrees fps □ Meandering degrees N/A Qualitative Attributes Water Appearance: □ No water □Algal Other: (check one) **♥**Clear □Turbid ☐ Sheen □ Surface on surface scum mats ☐ Silt/ clay ☑ Organic Substrate: ☐ Sand Other: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: Trees: (check all that apply) Ճ Saplings/Shrubs: Z-Herbs Avg. DBH of Dominants: N/A in. Dominant Bank Vegetation (list): Tubrum, Arundinaria gigantea Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: □ Natural (check one) XArtificial, man-made □ Manipulated Stream Quality \*: (check one) ☐ High □ Low Moderate Moderate

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

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

Notes:

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





Waterbody schr009 facing northwest upstream.



Waterbody schr009 facing southeast downstream.



Waterbody schr009 facing south across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: 21 Jan 2016 AIP 5chr 010 East Photos: NE, SW, E State: Crew Member Initials: County/Parish: Company: Chesapeake Tract Number(s): Nearest Milepost: Associated Wetland ID(s): d7601-DOOD, 27-001-DOO1 Survey Type: Centerline (check one) □Re-Route ☐ Access Road Other: Physical Attributes Stream Classification: (check one) □ Ephemeral □Intermittent Perennial Waterbody Type: (check one) □River ☐ Stream Ditch ☐ Canal Other: OHWM OHWM Indicator: W ater Width: (check all that apply) Clear line ☐ Shelving □Wrested ☐ Scouring on bank vegetation staining Height: 0,2 □Bent, matted, or missing □Wrack line Litter and ☐ Abrupt plant ☐ Soil characteristic change debris community change vegetation N/A Width of Waterbody - Top of Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Bank to Top of Bank: to Toe of Slope: Water Edge: 0.2 ox N/A N/A Sinuosity: Water velocity: Bank height Bank slope (check one) (Approx.) Right: Right: Straight degrees Left: □Meandering N/A degrees Qualitative Attributes Water Appearance: □ No water Sheen (check one) □ Clear □Turbid ☐ Surface □ Algal Other: on surface scum mats Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand Silt/ clay Organic Other: (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) Trees: Saplings/Shrubs: Herbs Avg. DBH of Dominants: NAX Dominant Bank Vegetation (list): Styraciflue, Arundinaria Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): None Aquatic Organisms Observed (list): T&E Species Observed (list): None Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Junk yard culvert Tributary is: (check one) □ Natural Artificial, man-made ☐ Manipulated Stream Quality ::

☐ High

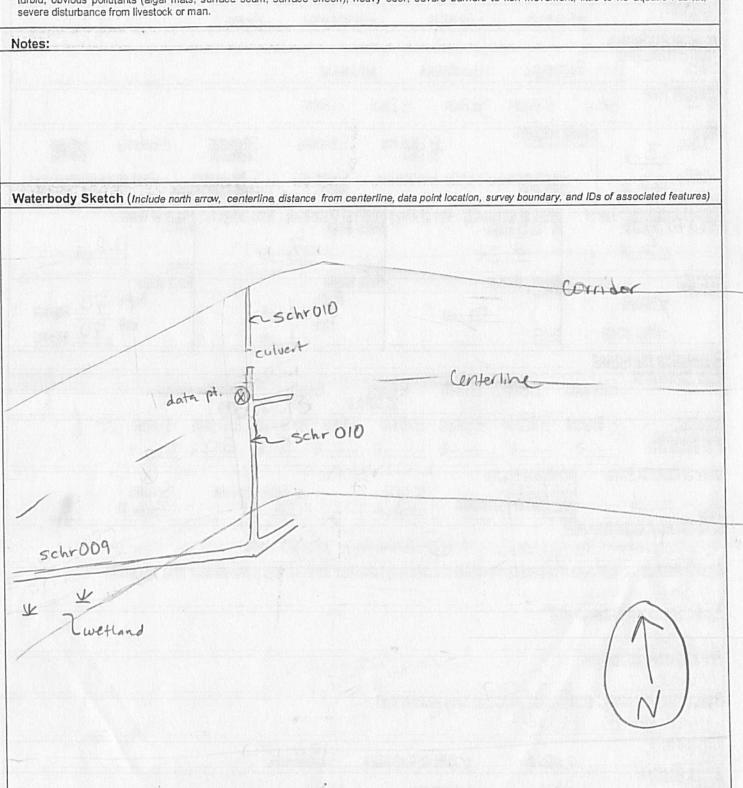
Moderate

□ Low

(check one)

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





Waterbody schr010 facing northeast upstream.



Waterbody schr010 facing southwest downstream.



Waterbody schr010 facing west across bank.

Linear Waterbody Data Sheet **Survey Description** Project Name: Waterbody Name: Waterbody ID: Date: UNT schroll Jan 2016 Crew Member Initials: Photos: State: County/Parish: Company: CAD Associated Wetland ID(s): Tract Number(s): Nearest Milepost: -001-D003,27-00+D004 Nove Survey Type: (check one) Centerline ☐ Access Road □Other: ☐Re-Route Physical Attributes Stream Classification: (check one) □ Ephemeral Perennial □Intermittent Waterbody Type: (check one) M Ditch ☐ Canal Other: □River ☐ Stream OHWM **OHWM Indicator:** ☐ Clear line ☐ Shelving □Wrested □ Scouring ₩ ater Width: staining on bank vegetation Height: 0,2 □Bent, matted, or missing □Wrack line Litter and ☐ Abrupt plant ☐Soil characteristic change community change debris vegetation N/A Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Depth of Water: Bank to Top of Bank: Water Edge: to Toe of Slope: d N/A N/A Sinuosity: Water velocity: Bank height Bank slope (check one) (Approx.) Right: Right: □ Straight degrees Left: Left □Meandering N/A degrees Qualitative Attributes Water Appearance: □No water □ Clear Sheen □ Surface □ Algal Other: (check one) □Turbid on surface scum mats Substrate: ☐ Gravel Silt clay ☐ Other: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Sand Organic (check all that apply)
% of Substrate: 50% Width of Riparian Zone: Vegetative Layers: Trees: (check all that apply) Saplings/Shrubs: Avg. DBH of Dominants: N/ADC Dominant Bank Vegetation (list): ambar styraciflue, Arundinaria gigantea Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Powerine casement waste, yard and Tributary is: (check one) □ Natural Artificial, man-made ☐ Manipulated Stream Quality \*: (check one) ☐ High Moderate □ Low

Waterbody	ID:	3834
	hr	01

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

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

Notes:

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

June yard corridor 0 = schroll who ood centerline rschr 012 wetland wchrouz corridor



Waterbody schr011 facing north upstream.



Waterbody schr011 facing south downstream.



Waterbody schr011 facing east across bank.

Linear Waterbody Data Sheet Survey Description Waterbody ID: Waterbody Name: Date: Project Name: schr 012 Crew Member Initials: Photos: County/Parish: State: nesapeake CAJ CSM Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-001 Wchr 002 Survey Type: Centerline (check one) □Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) □ Ephemeral □Intermittent Perennial Waterbody Type: Ditch Other: (check one) □River ☐ Stream ☐ Canal OHWM OHWM Indicator: DW ater Clear line ☐ Shelving □ Scouring (check all that apply) □W rested Width: on bank vegetation staining Height: □Bent, matted, or missing □Wrack line ☐Litter and ☐ Abrupt plant ☐Soil characteristic change vegetation debris community change N/AD Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Depth of Water: Bank to Top of Bank: to Toe of Slope: Water Edge: N/A N/AD Sinuosity: Water velocity: Bank height Bank slope (check one) (Approx.) Right: **⊠**Straight O degrees degrees □Meandering N/A Qualitative Attributes Water Appearance: □No water Other: □ Algal (check one) Clear □Turbid □Sheen □ Surface mats on surface scum ☐ Bedrock Substrate: ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand Silt/ clay Organic Other: (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: Trees: (check all that apply) M Herbs Saplings/Shrubs: Avg. DBH of Dominants: Dominant Bank Vegetation (list): Arundinaria Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): debris Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Power Tributary is: □ Natural (check one) Artificial, man-made Manipulated Stream Quality \*: (check one) ☐ High Moderate Moderate □ Low

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

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

Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) Junk yard \$2 Schr Oll corridor V 56hr 013 data pt wetland whor 002 corridor Dominion Transmission Line ROW V



Waterbody schr012 facing west upstream.



Waterbody schr012 facing east downstream.



Waterbody schr012 facing north across bank.

Linear Waterbody Data Sheet Survey Description Waterbody ID: Waterbody Name: Date: Project Name: schr013 UNT to East Ditch 21 Jan. 2016 Company: Crew Member Initials: Photos: County/Parish: State: E. SW. NW nesapeake Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-001-D003, 27-001-D004 wchr 002 Survey Type: (check one) Centerline ☐Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) □ Ephemeral □Intermittent Perennial Waterbody Type: Ditch (check one) □River ☐ Stream ☐ Canal ☐ Other: OHWM OHWM Indicator: W ater (check all that apply) ☐ Clear line □ Shelving □W rested □ Scouring Width: on bank vegetation staining Height: □Bent, matted, or missing □Wrack line □ Litter and ☐ Abrupt plant ☐Soil characteristic change vegetation debris community change N/A Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Depth of Water: (Approx.) Bank to Top of Bank: to Toe of Slope: Water Edge: N/AD N/A Water velocity: Bank height Bank slope Sinuosity: (check one) (Approx.) Right: Straight degrees ft. Left: □ Meandering ft degrees N/A Qualitative Attributes Water Appearance: □No water Clear Other: (check one) □Turbid □Sheen □ Surface □Algal on surface scum mats ☐ Gravel ☐ Silt/ clay Other: Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Sand Organic (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: Trees: (check all that apply) Saplings/Shrubs: Herbs Avg. DBH of Dominants: (0 in. N/A Dominant Bank Vegetation (list): rubrum, Arundinaria Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): ub merged NOOY Aquatic Organisms Observed (list): T&E Species Observed (list): Dne Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: (check one) ☐ Natural Artificial, man-made ☐ Manipulated Stream Quality :: (check one) ☐ High Moderate □ Low

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.

severe disturbance from livestock or man.	GRAD SEALED BY A	Tanaharan Bermanan	
Notes:			
Waterbody Sketch (Include north arrow, cen	terline, distance from centerline, dat	a point location, survey boundary, and I	Ds of associated features)
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Waterbody schr013 facing northeast upstream.



Waterbody schr013 facing southwest downstream.



Waterbody schr013 facing northwest across bank.

Linear Waterbody Data Sheet Survey Description Project Name: Waterbody Name: Waterbody ID: UNT to County/Parish: Photos: State: Associated Wetland ID(s): Tract Number(s): Survey Type: Centerline □Re-Route ☐Access Road □Other: (check one) **Physical Attributes** Stream Classification: (check one) □ Ephemeral □Intermittent Perennial Waterbody Type: Ditch ☐ Canal Other: (check one) ☐ Stream □River OHWM OHWM Indicator: Water □Wrested ☐ Clear line □ Shelving □Scouring Width: on bank vegetation staining Height: ☐Litter and ☐Abrupt plant ☐Soil characteristic change ☐ Bent, matted, or missing ☐ Wrack line debris community change N/A 🗆 Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: to Toe of Slope: Water Edge: N/A 🗆 N/A 🗆 Bank height Bank slope Sinuosity: Water velocity: Right: Straight degrees Left: □Meandering degrees N/A Qualitative Attributes Water Appearance: Clear (check one) □No water □Turbid □Sheen □Surface □Algal □Other: on surface mats ☐ Organic ☐ Bedrock ☐ Cobble Substrate: ☐ Gravel ☐ Sand Silt/ clay Other: ☐ Boulder (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: Saplings/Shrubs: ☐ Herbs Avg. DBH of Dominants: N/A 🗆 Dominant Bank Vegetation (list): banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): none Tributary is: ☐ Natural (check one) Artificial, man-made ☐ Manipulated Stream Quality \*: (check one) ☐ High ☐ Moderate ☐ Low

Waterb	ody ID:	Don	1
5	chr	00	6

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.

East/West Ditch, Blue line feature 36.76319°N Notes: 76-42800°Le Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) PFO weMands Ditch \*. > flow Schroop FO welland wchroozf



Waterbody schr006 facing west upstream



Waterbody schr006 facing east downstream

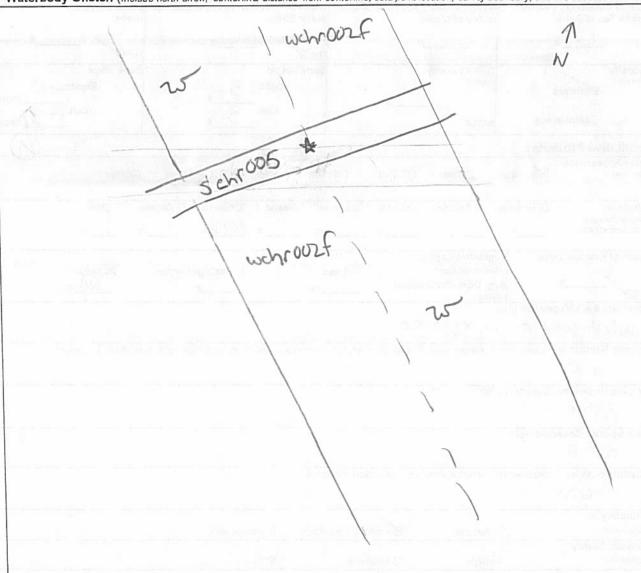
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ate:	County/Parish:		Company:	Cre	w Member Initials:	Photos: 4	acing
VA	chesap		EST-	A second	AM, ESM	W,E	October St. 180
act Number(s): 27 – めどユ	regnel rotteder	i mateur ferfelgund Hanna er til kann av f	Nearest Milep	oost:	Associated Wetl	and ID(s):	
irvey Type:	Centerline	e □Re-F	Route	□Access Road	□Other:	er un seguit sug gant to ?	STREET WILLIAMS
hysical Attributes				Asian and the Control of the			7 T. D. T. B. T. B. T. S. T. S
ream Classification:	□Ephemer	al Dinter	mittent	□Perennial			
aterbody Type:	River □ St	ream Dito	ch 🗆 Ca	nal 🗆 Other:			
HWM Width:ft.	OHWM Indica (check all that app		☐ Clear line	e \( \subseteq \text{Shelving} \)	□Wrested vegetation	Scouring	□Water staining
Height:ft.	□Bent, vegetati	matted, or missir on	ng □Wrack lir	ne	□Abrupt plant community char		racteristic change
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check one)	<sup>9</sup> No water □	⊒Clear □Tu		neen □Surfa n surface scum		Other:	
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check all that apply) % of Substrate:	%	%	%	_%% [c	<u> </u>	%	
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none	()						
T&E Species Observe	ed (list):		ly ly				
Disturbances (ex: live	stock access man	ure in waterbody, w	este discharge p	pipes):		<u> </u>	
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Tributary is: (check one)	□ Natu	ural b	Artificial, man	n-made	ulated		
Stream Quality :: (check one)	☐ High	n [	Moderate	blow			

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

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

Notes:

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





Waterbody schr005 facing west upstream



Waterbody schr005 facing east downstream

Linear Waterbody Data Sheet **Survey Description** Waterbody Name: Waterbody ID: Date: Project Name: UNT Crew Member Initials: Photos: State: County/Parish: Associated Wetland ID(s): Tract Number(s): NA 27-002 Survey Type: Centerline ☐Access Road □Other: (check one) ☐Re-Route Physical Attributes Stream Classification: □ Ephemeral Perennial □Intermittent Waterbody Type: Other: (check one) □River ☐ Stream Ditch ☐ Canal онум OHWM Indicator: ☐ Clear line □ Shelving □Wrested □ Scouring Water Width: on bank staining vegetation Height: ☐ Bent, matted, or missing ☐ Wrack line ☐Litter and ☐ Abrupt plant ☐Soil characteristic change debris community change vegetation Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Depth of Water: (Approx.) Water Edge: Bank to Top of Bank: to Toe of Slope: 12 ft N/A 🗆 N/AD Sinuosity: Bank slope Water velocity: Bank height check one) (Approx.) Right: Straight degrees □Meandering degrees N/A 🗆 Qualitative Attributes Water Appearance: Clear □No water □Sheen □Surface □Algal Other: □Turbid check one) on surface mats Substrate: ☐ Bedrock ☐ Boulder Cobble ☐ Gravel ☐ Sand Silt/ clay Organic ☐ Other: (check all that apply)
% of Substrate: Width of Riparian Zone: Vegetative Layers: ☐ Trees: (check all that apply) Saplings/Shrubs: ☐ Herbs Avg. DBH of Dominants: in. N/A 🗆 Dominant Bank Vegetation (list): gracistus Liquidombar Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): ONP T&E Species Observed (list): one Disturbances (ex: livestock access, manure in-waterbody, waste discharge pipes): Tributary is: (check one) ☐ Natural ☐ Manipulated Artificial, man-made Stream Quality :: ☐ High ☑ Moderate □ Low

Waterbody ID:	1
Schr	004

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

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

Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) SCHY OO4 weter oozf



Waterbody schr004 facing west upstream



Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: County/Parish: Associated Wetland ID(s): Tract Number(s): 27-002 Survey Type: 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 Indicator: OHWM □ Shelving □Wrested □ Scouring Water ☐ Clear line Width: vegetation staining on bank Height: □ Bent, matted, or missing □ Wrack line ☐Litter and ☐ Abrupt plant ☐Soil characteristic change community change debris vegetation N/A Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to to Toe of Slope: Water Edge: Depth of Water: Width of Waterbody - Top of (Approx.) Bank to Top of Bank: N/A 🗆 N/A Bank slope Sinuosity: Water velocity: Bank height (check one) Approx.) Right: Straight I eft □Meandering degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water Surface □Algal □Other: □ Clear □Sheen (check one) □Turbid on surface scum ☐ Boulder ☐ Cobble ☐ Sand Silt/ clay 

Organic 

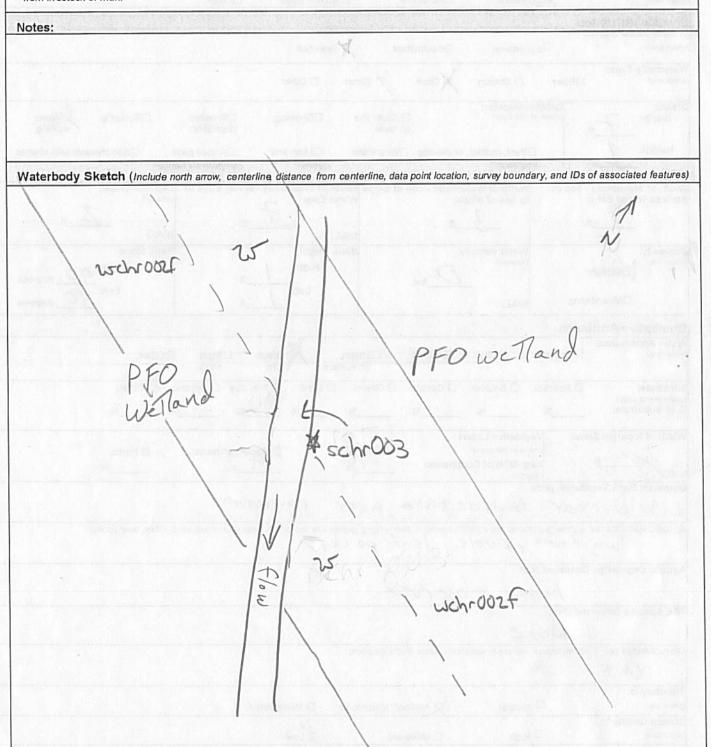
Other: Substrate: ☐ Bedrock (check all that apply)
% of Substrate: Width of Riparian Zone: Vegetative Layers: ☐ Trees: (check all that apply) Saplings/Shrubs: Avg. DBH of Dominants: in. N/AD Dominant Bank Vegetation (list): Styracitica, Acer rubium Liquidombar Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools):

Two Laws, pools, leaf packs Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: ☐ Natural (check one) Artificial, man-made ☐ Manipulated Stream Quality \*: ☐ High (check one) ☐ Moderate Low

1	Waterboo	dy I	D:	S SERVE
	Sc	hr	0	03

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.



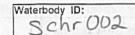


Waterbody schr003 facing north upstream



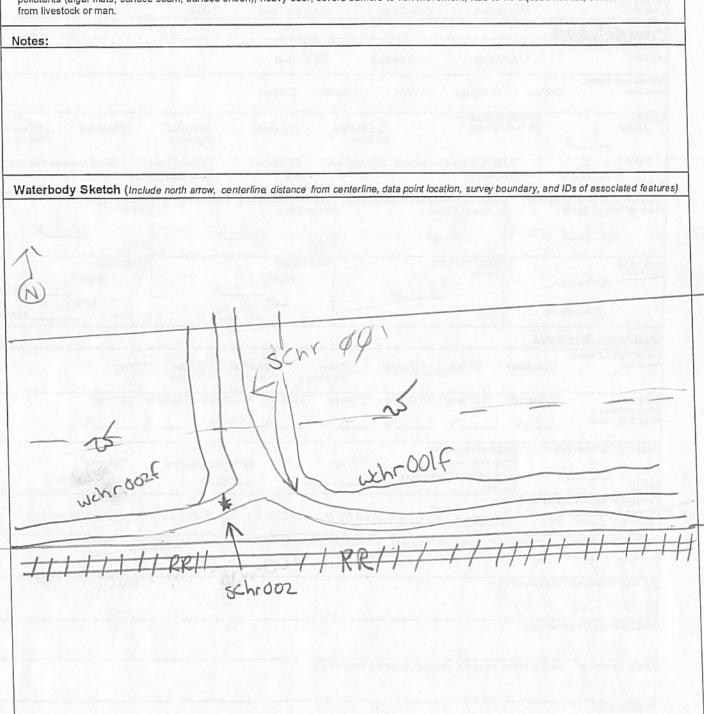
Waterbody schr003 facing south downstream

Linear Waterbody Data Sheet Survey Description Project Name: Waterbody Name: Waterbody ID: UNT to Dismal swamp Schr 002 Company: Crew Member Initials: Photos: State: County/Parish: Chesapeake RAM, CSM Tract Number(s): Nearest Milepost: Associated Wetland ID(s): 27-006 WChr 0002 Survey Type: Centerline □Access Road Other: ☐Re-Route (check one) Physical Attributes Stream Classification: □ Ephemeral □Intermittent Perennial Waterbody Type: Ditch Other: ☐ Canal (check one) □River ☐ Stream онум OHWM Indicator: ₩ater ☐ Scouring Width: ☐ Clear line □Shelving □Wrested vegetation staining on bank ☐Soil characteristic change Height: ☐ Bent, matted, or missing ☐ Wrack line ☐ Abrupt plant □ Litter and debris community change vegetation Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Water Edge: Bank to Top of Bank: to Toe of Slope: N/A 🗆 N/A 🗆 Bank slope Water velocity: Bank height Sinuosity: (check one) Approx.) Right: Straight degrees Left: □Meandering degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water Clear □Surface □Algal Other: □Sheen □Turbid (check one) on surface scum Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Sand ☐ Silt clay ☐ Organic Other: (check all that apply) % of Substrate: 1000% % Width of Riparian Zone: Vegetative Layers: Herbs (check all that apply) Trees: Saplings/Shrubs: Avg. DBH of Dominants: N/A 🗆 Dominant Bank Vegetation (list): Styracifina, Morella cerifera, Saururus cernuus Liquidombar Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): herbaceous Vegeton 2-Aquatic Organisms Observed (list): Lomsel Flies T&E Species Observed (list): NUNE Disturbances (ex: livestock access manure in waterbody waste discharge pipes); Tributary is: (check one) □ Natural Artificial, man-made ☐ Manipulated Stream Quality :: Low (check one) ☐ High ☐ Moderate



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





Waterbody schr002 facing west upstream



Waterbody schr002 facing east downstream

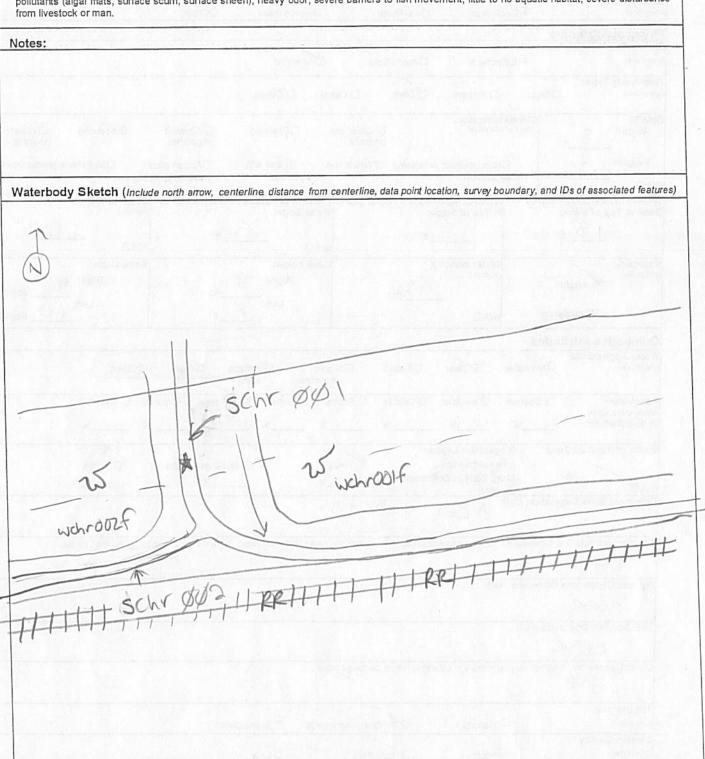
near Waterbod							
urvey Description	1	Matochadus	70'		Materbody ID:	Dat	0.
oject Name: ACP		Waterbody Nar	ne: o Dismal s	Holamp	Waterbody ID:		7/29/15
ate:	County/Parish:	MIA 1 0	Company:		ew Member Initials:	1 /	facing
V A	ChESaPE	Palse			AM, ESM	N, 5	
act Number(s):			Nearest Milepos	st:	Associated W	etland ID(s):	
27 - 00	6	DX	72		WChr	001	
irvey Type:	Centerline	e □Re-l	Route [	□Access Road	□Other:		
hysical Attribute	S	E					
ream Classification: neck one)	□Ephemer	al □Inte	rmittent [	Perennial			
(aterbody Type: heck one)	⊒River □ St	ream 🗹 Dit	ch 🗆 Cana	I □ Other:			
HWM Width: 15_ft.	OHWM Indica (check all that appl		☐ Clear line on bank	□Shelving	□Wrested vegetation	descouring	□Water staining
Height: 1.3_ft.	□Bent, vegetatio		ng □Wrack line	□Litter and debris	□ Abrupt plar community cl		racteristic change
/idth of Waterbody - ank to Top of Bank:	Top of Width to Toe	of Waterbody - e of Slope:	W	idth of Waterboo dater Edge:	dy - Water Edge to	Depth of Water: (Approx.)	, <u>O</u> ft.
inuosity: heck one)  Straight	(Approx	1/15		ank height Right:	E ft.	Bank slope Right: Left:	degrees
	THE PARTY OF THE P				ft.		degrees
Qualitative Attrib	utes						
check one)	□No water 🗓	3Clear □Tu		en □Surf urface scu	-	□Other:	
Substrate: check all that apply) % of Substrate:	□ Bedrock □ E	Boulder 🗆 Co			PSilty clay ☐ Organ	oic Other:	
Width of Riparian Zo	(check all the Avg. DB (approx.)	ve Layers: hat apply) H of Dominant:	Trees:		] Saplings/Shrubs: in.	☐ Herbs in.	
Dominant Bank Vege	etation (list):	cer r	ubrum				
Aquatic Habitats (ex:		ged aquatic vegeta	ation, overhanging b	eanks/roots, leaf pac	ks, large submerged wo	ood, riffles, deep pool	s):
Aquatic Organisms	Observed (list):						
T&E Species Obser							
Disturbances (ex: liv		re in waterbody v	aste discharge pipe	es):			
Tributary is:	□ Natu	ral 🕏	Artificial, man-m	ade 🗆 Manip	oulated		
Stream Quality :: (check one)	□ High	d	Moderate	□ Low			

1	Waterbody ID:	
	Schroo	(

<sup>a</sup> 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





Waterbody schr001 facing north upstream



Waterbody schr001 facing south downstream

Linear Waterbody Data Shee	t			
Survey Description			Waterbody ID:	Date:
Project Name:	Waterbody Name:		IN THE RESERVE AND ADDRESS OF THE PARTY OF T	10/26/15
HCP	Unt to D	Dismall Swamp	-0110	ON BREEDING COMPLETED CARRESTS OF PRESENT PRINT AND
State: County/Parish:		pany:	Crew Member Initials:	Photos: Facing
VA Chesas	peake E	SI	KT, KM	N.S.EU
Tract Number(s):	Near	est Milepost:	Associated Wet	
27-606		79.3	Non	e
Survey Type: (check one) □Centerlin	e  Ke-Route		i □Other:	
Physical Attributes				
Stream Classification: (check one)	al Intermitter	nt □Perennial		
Waterbody Type: (check one) □River □ St	ream 💆 Ditch	□ Canal □ Other		
OHWM OHWM Indicated (check all that app	N M	Clear line ☐ Shelvir bank	g Wrested vegetation	☐Scouring ☐Water staining
N/A□ tt. vegetation		debris	community cha	
Width of Waterbody - Top of Bank to Top of Bank: Width to Toe	of Waterbody - Toe of Slope:	of Slope Width of Waterb Water Edge:	5 ft.	epth of Water:   pprox.)
Sinuosity: Water (Approx.  Straight  Meandering  N/A	velocity:	Bank height Right: Left:	<u>Ч</u> п. <u>Ч</u> п.	Right: 45 degrees Left: 45 degrees
Qualitative Attributes				
Water Appearance:	Clear □Turbid	THE REAL PROPERTY AND PERSONS ASSESSED AS A PROPERTY OF THE PARTY OF T	urface □Algal □ um mats	Other:
(check all that apply)		□ Gravel   ズ Sand   / ———————————————————————————————————	Silt/ clay ☐ Organic	□ Other:
% of Substrate:%	%%		70 70 70	
50 ft (check all the Avg. DBH (approx.)	e Layers: t apply) l of Dominants:	Trees: 2	Saplings/Shrubs:	☑ Herbs <u>NA</u> in.
Dominant Bank Vegetation (list):  More lla Cerifera, N Aquatic Habitats (ex: submerged or emerge	yssa sylvat	ica, Lirioden	dron tulipit	Arundinaria era, gigantea
Aquatic Habitats (ex: submerged or emerged Submerged 1095	and the second s		cks, large submerged wood,	riffles, deep pools):
Aquatic Organisms Observed (list):	, ico-i po			
none observed				
T&E Species Observed (list): none observed				
Disturbances (ex: livestock access, manure	in waterbody waste discl	harge pipes):		
none observed	materialdy, made distri	g- FT-//		
Tributary is: (check one)		I, man-made ☐ Manip	pulated	
Stream Quality *: (check one)	⊠ Modera	te 🗆 Low		

Waterbody ID: Schp 002

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

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

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

Notes:

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

wchrool

7

\*Schp002



Waterbody schp002 facing northwest upstream.



Waterbody schp002 facing southwest downstream.



Waterbody schp002 facing northeast across bank.

Linear Waterbody Data Sheet Survey Description Waterbody ID: Waterbody Name: Project Name: 24 Sept 2015 LINI to Poetsmouth Scho003 Ditch Crew Member Initials: Photos: County/Parish: Company: State: KR, CSM nesa VA Associated Wetland ID(s): Nearest Milepost: Tract Number(s): NI Survey Type: □Access Road Other: □Re-Route (check one) \*\*Centerline Physical Attributes Stream Classification: □ Perennial □ Ephemeral Aintermittent (check one) Waterbody Type: Ditch Other: ☐ Canal (check one) □River ☐ Stream OHWM Indicator: (check all (hat apply) MWHO □Water ☐ Shelving □Wrested ☐Scouring ☐ Clear line Width: staining vegetation on bank ☐Soil characteristic change ☐Bent, matted, or missing ☐Wrack line □Litter and □Abrupt plant Height: community change debris vegetation NIAM Depth of Water: (Approx.) Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Width of Waterbody - Top of Water Edge: to Toe of Slope: Bank to Top of Bank: N/AD N/AD Bank slope Bank height Water velocity: Sinuosity: (Approx.) (check one) Right: Straight degrees Left: degrees □Meandering N/AD Qualitative Attributes Water Appearance: Other: □No water □ Surface □ Algal **MClear** □Turbid □ Sheen (check one) on surface Other. Z Cobble Sand ☐ Silt/ clay ☐ Organic Gravel ☐ Boulder Substrate: ☐ Bedrock (check all that apply) % of Substrate: 0/6 Width of Riparian Zone: Vegetative Layers: Herbs A Saplings/Shrubs: check all that apply) Trees: A in. Avg. DBH of Dominants: inus taeda Dominant Bank Vegetation (list): Acer rubyum Aquatic Habitats (ex: submerged or emerged aquatic vegetation overhanging banks/roots leaf packs large submerged wood riffies deep pools): woody debris Aquatic Organisms Observed (list): T&E Species Observed (list): manure in waterbody waste disonarge pipes!: Disturbances 'ex' twestock access road Tributary is: Artificial, man-made ☐ Manipulated ☐ Natural (check one) Stream Quality :: ☐ High Moderate I Low (check one)

Waterbody II	):	
Scho	0	03

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.

5:					
		FI CARRAL LIVE	ti yajida eta ke ma		
erbody Sketch (Ind	lude north aπow, centerli	ne distance from centerline, da	ta point location, survey	boundary, and IDs of a	ssociated feature
		1 -1 -1 -1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	
100		Ralitroa	-61		
		1 Ralilroa Ditch s	() (1)		
Barrier Commence		Ditch S	000003	The second	London Light
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	nente	cline			DT
	Otrojo	III			9
					\
					1
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					1
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					1 4



Waterbody scho003 facing west upstream.



Waterbody scho003 facing east downstream.



Waterbody scho003 facing north across bank.

Linear Waterboo	estratega estratega esta de de la colo		nervice selection (Specialist		72-717-6-727-73		
Survey Description	on				Waterbody ID:		Date:
Project Name:		Waterbody Nar	ne: Cretk		scho		09/30/15
State:	County/Parish:	ake	Company: ESI		Crew Member Initia	- N	SIE
Tract Number(s): 27-	-026-A003, 2	7-026-1004			Associated	Wetland ID(s):	003, wcho 004
27-026-A001	27-026- AO	02	72	.8	000100	-2, v.C/10	000,00000
Survey Type: (check one)	Centerline		Route D	Access Road	□Other:		
Physical Attribute							
Stream Classification (check one)	: □Ephemera	al □Inter	mittent	Perennial			
Waterbody Type: (check one)	River Str	ream 🗆 Dito	:h □ Canal	☐ Other:			
OHWM Width: 14 ft.	OHWM Indica (check all that appl		Clear line on bank	□Shelving	g □Wrested vegetation	□Scouri	ng ⊟Water staining
Height:ft.	Bent, r vegetatio	matted, or missin on	g □Wrack line	□Litter an debris	d Abrupt pl community	ant □Soil change	characteristic change
Width of Waterbody - Bank to Top of Bank:	Top of Width to Toe	of Waterbody - of Slope:	Toe of Slope Wie	dth of Waterbo iter Edge:	ody - Water Edge to	Depth of Wat	er:
ft.	-	ft.	N/A	<u>.</u>	<u>3ft.</u>	N/A□	ft.
Sinuosity: (check one)  Straight	(Approx.)	9	Ba	nk height Right: Left:	2_ft. 2_ft.	Bank slope Rigi	degrees
Qualitative Attrib	utes						
Water Appearance:		Clear □Turb	id □Sheen on sur		· ·	□Other:	
Substrate: (check all that apply) % of Substrate:	□ Bedrock □ Bo	oulder 🗆 Cobb	ole	Sand [	□ Silt/ clay □ Organ	nic   Other:  %	
Width of Riparian Zor	(check all that Avg. DBH (approx.)	-	Trees:	}	Saplings/Shrubs:	Herbs NA	in.
Arundingrid		bytalacca a	maricana 1	Murdahy	nia koicak	Vacciniun	n corymbosum
Aquatic Habitats (ex:	submerged or emerge	d aquatic vegetatio	n, overhanging bank	ks/roots, leaf paci	ks, large submerged wo	ood, riffles, deep po	ols):
Aquatic Organisms O							
T&E Species Observe	rved						
	served						
Disturbances (ex: lives		in waterbody waste	e discharge pipes):				
BOXICUIV	QX +S	,,	and an				
Tributary is:	Natural	□ Ar	tificial, man-made	□ Manipu	ulated		
Stream Quality *:	1	\/					
(check one)	☐ High	□ Mc	oderate	☐ Low			

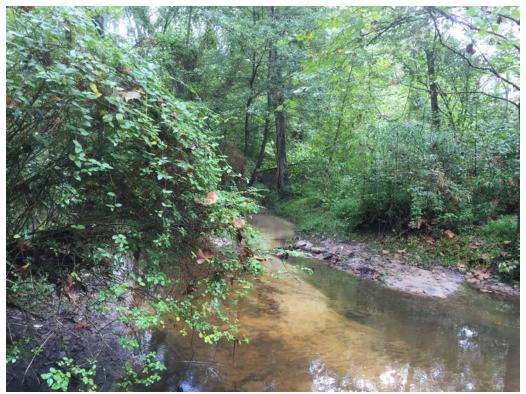
Waterb	ody	ID:
(0)	hn	00

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

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

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

pollutants (algal mats, surface scum, surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man. Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) cuscho 607 W wcho 004 wchood3 5ch0001



Waterbody school facing north upstream.



Waterbody scho001 facing south downstream.



Waterbody scho001 facing east across bank.

inear Waterbody Data Shee				DATE DE L'ESTATE DE L'ANTINE D
Survey Description			Waterbody ID:	Date:
Project Name:	Waterbody Name:		schoool	1 7 1. 1.1
ACP	Deep Creek		TO SEE SEPTEMBER PUBLISHED ON A REPORT OF SEPTEMBER SEPT	The second property of the second sec
State: County/Parish:	Company:	С	rew Member Initials:	Photos: N, S, E
VA Cheso	peake ESI		LR, MS Associated We	
Tract Number(s): LINNUMBER 27-026-2002 17-026-	And H	77.4	wel	no004
Survey Type:			501	
check one) □ Centerlin	e DRe-Route	□Access Road	□Other:	
Physical Attributes				T/T/2019
Stream Classification:  (check one)	ral	Perennial		
Waterbody Type: check one) □River S	tream □ Ditch □ C	anal   Other:	Section of the sectio	
OHWM OHWM Indic (check all that app		ne	□Wrested vegetation	□Scouring □Water staining
ft. vegetati	matted, or missing □Wrack li on	ine ULitter and debris	☐Abrupt plant community cha	☐Soil characteristic change ange
N/A□ Width of Waterbody - Top of Width	of Waterbody - Toe of Slope	Width of Waterboo	dy - Water Edge to	Depth of Water: Approx.)
Bank to Top of Bank: to To	e of Slope:	Water Edge:		>3 ft.
25 n.	15 n.	N/A□		WA 🗆
Silidosity.	velocity:	Bank height		Bank slope
(Approx Straight		Right: 4	f n.	Right: 45 degrees
V. Santa and Santa a	fps	Left: 4		Left: 30 degrees
Meandering N/A□		-	ft.	
Qualitative Attributes				
Water Appearance: (check one)	Olcai E i ale	neen □Surfa n surface scun		Other:
Substrate: ☐ Bedrock ☐ E	Boulder □ Cobble □ Grav	el 🖾 Sand 🖾	Silt/ clay	☐ Other:
(check all that apply) % of Substrate:%	%%	_% 60 % <u></u>	40 %%	%
Width of Riparian Zone: Vegetati	ve Layers:		1	
(check all the Avg. DB	at apply) H of Dominants:		Saplings/Shrubs: in.	Herbs NA in.
N/A□ (approx.)  Dominant Bank Vegetation (list):			_	
Arundinaria gigo	intea, Leucoth	10e sp.,	Quercus	s nigra
Aquatic Habitats (ex: submerged or emerg	ed aquatic vegetation, overhanging	banks/roots, leaf packs	s, large submerged wood	, riffles, deep pools):
leaf Packs, SI	obmerged w	bood		
Aquatic Organisms Observed (list):				
none obser	ved.			
T&E Species Observed (list):				
none obse	rved			THE THE PARTY OF T
Disturbances (ex: livestock access, manur		oes):		
none observa				
Tributary is: (check one) Natura	al	nade □ Manipu	lated	
Stream Quality *:	Moderate	□Low		

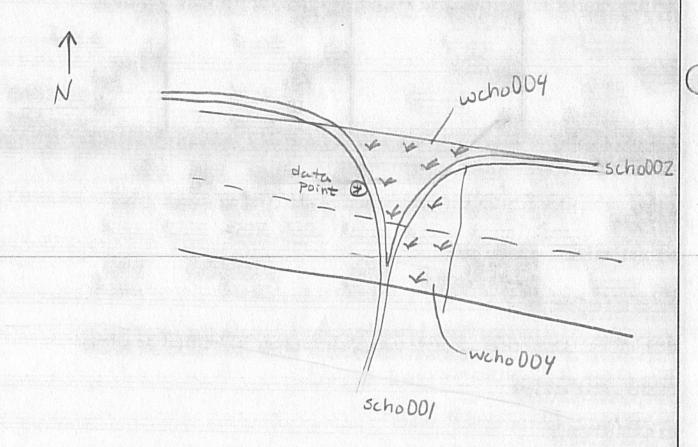
\* High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance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

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

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

Notes:

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





Waterbody data point scho001\_s2 facing north upstream.



Waterbody data point scho001\_s2 facing south downstream.

Photo Sheet 1 of 2



Waterbody data point scho001\_s2 facing east across.

Linear Waterbody	Data Sheet				
Survey Description		Marie Aurilla Paris			
Project Name:	Waterboo		24.7	Waterbody ID:	Date:
ACP	l U	NT to L	Doip Creek	scho 002	09/30/15
State: C	ounty/Parish: Mesapeake	Company:	Crew	-T	Photos: NE, SW, NW
Tract Number(s): 2	7-026-A006	Nearest Mile	post:	Associated Wetland	1
27 - 026 - A083 Survey Type:	27-026-A004		72.8	wcho 004	t
(check one)	Centerline [	□Re-Route	□Access Road	□Other:	
Physical Attributes	215 11: 8522 - 523				
Stream Classification: (check one)	□Ephemeral [	□Intermittent	Perennial		
Waterbody Type: (check one)	ver Stream	□ Ditch □ Ca	anal   Other:		
OHWM Width:ft.	OHWM Indicator: (check all that apply)	Clear lin	ne □Shelving	□Wrested □ vegetation	Scouring
Height: 2_ft.	Bent, matted, or regetation	missing    Wrack lin	ne □Litter and debris	☐Abrupt plant community change	□Soil characteristic change
Width of Waterbody - Top		ody - Toe of Slope	Width of Waterbody -	Water Edge to Depth	of Water:
Bank to Top of Bank:	to Toe of Slope:		Water Edge:	(Approx.)	1
ft.	n.		N/A	_ft. N/A□	ft.
Sinuosity:	Water velocity:		Bank height	Bank s	lope
(check one)	(Approx.)		Right: 3		Right: 85
		fps	Left:	_ft.	Left: degrees
Meandering	N/A□			_ft.	degrees
Qualitative Attributes	S				
Water Appearance: (check one)	water Clear	□Turbid □Sh on	een □Surface surface scum	□Algal □Other mats	:
Substrate: □ B	edrock 🗆 Boulder 🗆	Cobble   Grave	el ⊠ Sand □ Silt/	/ clay   Organic   O	ther:
(check all that apply) % of Substrate:	%%	%	<u>% 100</u> %	_%%	%
Width of Riparian Zone:	Vegetative Layers:	2/	V	V	
	(check all that apply)  Avg. DBH of Domina (approx.)	ants:	in.	olings/Shrubs:	Herbs V <del>/}</del> in.
Dominant Bank Vegetatio	1 35			2.1	
Murdannia keis	ak, Rubus	argutus,1	Noodwardia gr	reolata, Lonice	ra japonica.
Aquatic Habitats (ex: subm			banks/roots, leaf packs, larg	ge submerged wood, riffles, o	deep pools):
Leat packs,	NOODY debris	pools			
Aquatic Organisms Obser	, ,	,			
BOX-TUTTLE,				- 1-20-0	
T&E Species Observed (lis	A CONTRACTOR OF THE CONTRACTOR				
none obser					
Disturbances (ex: livestock		, waste discharge pipe	es):		
	served				
Tributary is: (check one)	Natural	☐ Artificial, man-m	ade   Manipulated		
Stream Quality *:	□ High	Moderate	□ Low		
, , , , , , , , , , , , , , , , , , , ,	- ragii	-Moderate	L LOW	14114	

50 10 0 ( ) () T

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

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

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

Notes:

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

schowl

Wcho002

wcho OD3-

, wch0004

- scho002

1

Form Rev. 05/16/2014



Waterbody scho002 facing northeast upstream.



Waterbody scho002 facing southwest downstream.



Waterbody school2 facing northwest across bank.

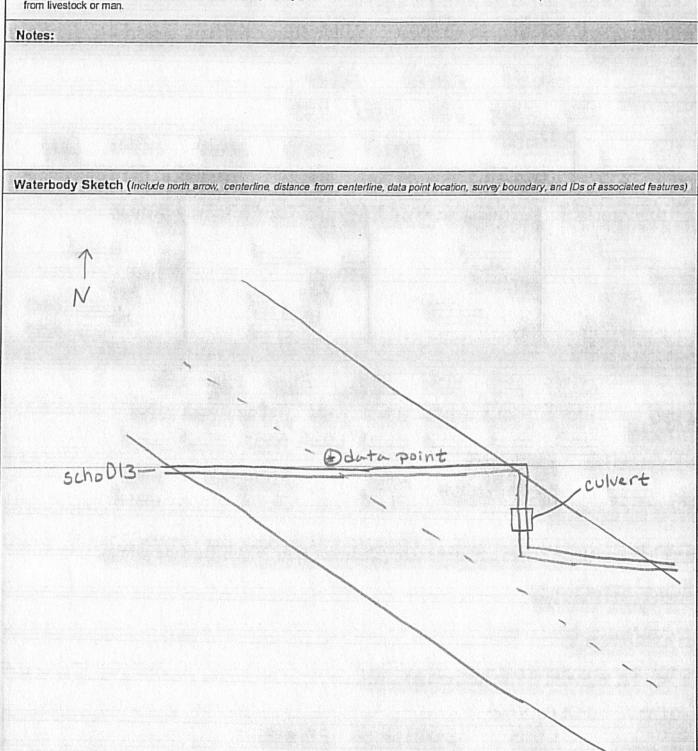
Linear Waterbody Da	ita Sheet			
Survey Description		Service Commence	have to the edu ID:	Date:
Project Name:	Waterbody Na		Waterbody ID:	
HCP	UNTTO	Deep Creek	scholl3	2/10/16
State: Cour	tu/Darich:	Company	Crew Member Initials:	Photos: Facing
VA C	hesapeake	ESI	LR, MS	E, WIS
Tract Number(s): 27-026-4006	, 27-026-ADD	Nearest Milepost: 77,5	Associated Wetland	
Survey Type:		Route □Access Road	[]Other:	
Physical Attributes				
Stream Classification:	□Ephemeral ⊠Inte	ermittent   Perennial		
Waterbody Type: (check one) □River	☐ Stream ☐ Di	tch   Canal   Other:		
OHWM OHWM Che	-IWM Indicator: eck all that apply)	Clear line Shelving	g □Wrested l vegetation	Scouring
Height: 0.5 ft.	⊠Bent, matted, or missi vegetation	ng □Wrack line □Litter ar debris	d □Abrupt plant community change	☐Soil characteristic change
N/A□ Width of Waterbody - Top of	Width of Waterbody	Toe of Slope Width of Waterbo		n of Water:
Bank to Top of Bank:	to Toe of Slope:	Water Edge:	(Approx	0.4 1
	n.	N/A□ —	2_ft. N/AC	435 B B B B B B B B B B B B B B B B B B B
Sinuosity:	Water velocity:	Bank height	Bank	slope
check one) (Straight	(Approx.)	Right:	1 .	Right: 50 degrees
- Politing.it		fps Left:	<u>]</u> ft.	Left:
□Meandering	N/A□		<u>f</u> t.	50 degrees
Qualitative Attributes				
Water Appearance:	ater ⊠Clear □Tu	bid □Sheen □Sur	face □Algal □Oth	er:
(Criecy Grie)	ater Apical 27	on surface sca	[18] [18] [18] [18] [18] [18] [18] [18]	
Substrate:   Bedr	rock   Boulder   Cot	ble □ Gravel ဩ Sand 1	Silt/ clay   Organic	Other:
(check all that apply)	%%	_%% <u>60</u> %	40 %% _	%
Width of Riparian Zone:	Vegetative Layers:			<b>7</b>
30 ft.	(check all that apply) Avg. DBH of Dominants	(B) 이 이 (B)	Saplings/Shrubs: ]	A Herbs <u>NP</u> in.
N/A□ Dominant Bank Vegetation (	(approx.) (list):			
Pinus tack	a, Juncus	effusus, Mora	ella cerite	ra
Aquatic Habitats (ex: submerg	ged or emerged aquatic vegetat	ion, overhanging banks/roots, leaf pac	ks, large submerged wood, riffle	s, deep pools):
leaf pack			<u> </u>	
Aquatic Organisms Observe	ed (list):			
none ob	served			and the state of the telephone and the state of the state
T&E Species Observed (list):				
none obs	erved			Karana ang Karana mangaran
Disturbances (ex: livestock acc	cess, manure in waterbody, wa	ste discharge pipes):		
none obs	served	THE RESERVE OF THE PERSON OF T		A STATE OF THE STA
Tributary is: (check one)	□ Natural 📜	Artificial, man-made	ulated	
Stream Quality *:	Пизаь Ма	Anderste D Low		

Waterbody ID:	Ų.	
Waterbody ID:	0	13

\* 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.





Waterbody data point school 13 facing east upstream.



Waterbody data point scho013 facing west downstream.

Photo Sheet 1 of 2



Waterbody data point school3 facing south across.

Linear Waterbody Data She	eet		- CALL BUILD NO DE SANS	CONTRACTOR CONTRACTOR	
Survey Description	growing production		Waterb	ody ID:	Date:
Project Name:	Waterbody Na	A SHARE THE PARTY OF THE PARTY		no 014	2/11/11
ACP	UNT-	to Deep Cree	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.		0/11/10
State: County/Parish	ı	Company:	Crew Memb		Photos: Faling
VA Chesa	peake	ESI	STREET, STREET	MS	N,S,E
Tract Number(s):		Nearest Milepost:	ACLA COMPLIANTING THE SAT TO SANIE FOR THE ACT OF THE SATISFACE.	ciated Wetland	2000 C. A. C A COMBRELL MANAPACIONE, D. 1994 (1995) 200, C. 1995 (1997) 120 (1997) 120 (1997) 120 (1997) 120 (1997)
27-046, 27-047	7	78.3	\	ncho D	11
Survey Type:  check one)  Center	tine ke-	Route □Access	Road □Ot	her:	
Physical Attributes					
Stream Classification: (check one)	neral Infinte	mittent   Perenr	ial		
Waterbody Type: check one) □River □	Stream Ditt	ch 🗆 Canal 🗆	Other:		
OHWM Ind Width: 3 ft.		Clear line OS		/rested [ etation	Scouring
Height:ft. /Ber	nt, matted, or missir ation	ng □Wrack line □L deb		brupt plant imunity change	☐Soil characteristic change
Width of Waterbody - Top of Wid	th of Waterbody - oe of Slope:	Toe of Slope Width of W Water Edg	raterbody - Water l e: ft.	Edge to Depth (Approx N/A□	0,5 ft.
Sinuosity:  Check one)  Astraight  Mark  (App.)  Meandering  N/A	0	Bank heig Ri	nt ght: 2 ft. eft: 3 ft.	Bank	Right: 90 degrees Left: 90 degrees
Qualitative Attributes		Constitution Clarks			
Water Appearance; (check one)	Clear □Turl	on surface	scum I	Algal □Othe πats □ Organic □	other:%
20 ft. (check all Avg. D (approx.)	The second secon	Trees:	Saplings/S		Herbs NA_in.
Clethra alnifolio	, Liquidas	mbar styraci	flux, Aru	indinari	ia gigantea
Aquatic Habitats (ex. submerged or eme	erged aquatic vegetation	on, overhanging banks/roots,	eaf packs, large subm	erged wood, riffles	s, deep pools):
Aquatic Organisms Observed (list):	}				
T&E Species Observed (list):	ocazan a cultura de la composition de Marchaelle de la composition de la comp		12 March States Co. Co.		
none observ	Kd				
Disturbances (ex: livestock access, man	ure in waterbody, was	te discharge pipes):	dine	2 nw	
ditch between	homes	te discharge pipes):	- WALE		
Tributary is:	,		Manipulated		
(CITOCA CITO)		THE RESIDENCE OF THE PROPERTY			

Waterbody ID: SCho 014

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

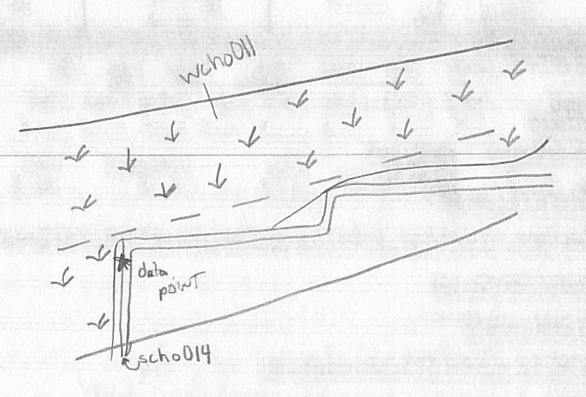
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

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

N





Waterbody data point school4 facing north upstream.



Waterbody data point school4 facing south downstream.



Waterbody data point school4 facing east across.

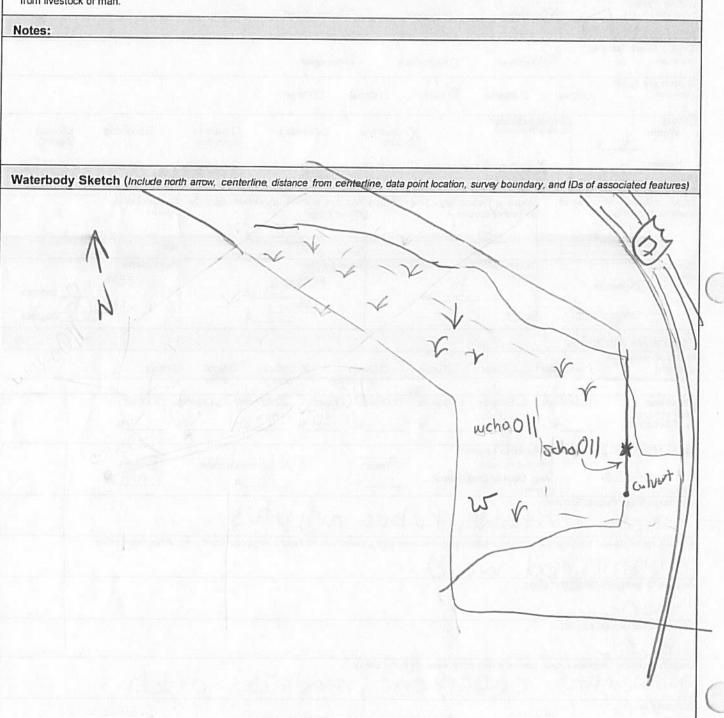
Linear Waterbody Data Sheet **Survey Description** Date: Waterbody Name: Waterbody ID: Project Name: UNT to DEED GREK Crew Member Initials: Photos: County/Parish: State: Nearest Milepost: Associated Wetland ID(s): Tract Number(s): wchol 78,6 Survey Type: □Other: (check one) □ Centerline ☐Re-Route ☐Access Road Physical Attributes Stream Classification: (check one) Perennial □ Ephemeral □Intermittent Waterbody Type: Ditch ☐ Other: (check one) □River ☐ Stream □ Canal OHWM **OHWM Indicator:** Clear line on bank Water □ Shelving □Wrested □ Scouring Width: vegetation staining Height: ⊠Bent, matted, or missing □Wrack line ☐Litter and □Abrupt plant ☐Soil characteristic change community change vegetation debris N/A 🗆 Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: Water Edge: to Toe of Slope: N/A 🗆 N/A 🗆 Bank height Bank slope Sinuosity: Water velocity: (Approx.) (check one) Right: Right: **Straight** degrees Left: degrees □Meandering N/A 🗆 Qualitative Attributes Water Appearance: □No water □Algal □Other: □Sheen **Surface** □ Clear □Turbid (check one) on surface mats ☐ Bedrock ☐ Boulder ☐ Cobble Sand ☑ Silt/ clay ☐ Organic ☐ Other: Substrate: (check all that apply)
% of Substrate: Width of Riparian Zone: Vegetative Layers: M Herbs (check all that apply) ☐ Trees: NH in. Avg. DBH of Dominants: in. in N/A Dominant Bank Vegetation (list): Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: (check one) ☐ Natural □ Manipulated Artificial, man-made Stream Quality 8: ☐ High Low (check one) ☐ Moderate

Waterbo	dy I	D:
50	h -	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.





Waterbody school11 facing south upstream.



Waterbody school11 facing north downstream.



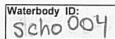
Waterbody school11 facing east across bank.

Linear Waterbody Data Sheet **Survey Description** Waterbody ID: Date: Project Name: Waterbody Name: 10/15/15 scho 004 Cook UNTTO Crew Member Initials: Photos: State: County/Parish: chesappake K.M. Nearest Milepost: Associated Wetland ID(s): Tract Number(s): -06 Survey Type: Centerline (check one) □Re-Route ☐Access Road ☐Other: Physical Attributes Stream Classification: (check one) Intermittent □ Perennial □ Ephemeral Waterbody Type: (check one) □River ☐ Stream Ditch ☐ Canal ☐ Other: OHWM **OHWM Indicator:** ☐ Clear line Shelving □Wrested □ Scouring Water Width: vegetation staining on bank ft. Height: □Bent, matted, or missing □Wrack line ☐Litter and □Abrupt plant ☐Soil characteristic change community change vegetation debris N/A 🗆 Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Approx.) Bank to Top of Bank: Water Edge: to Toe of Slope: 20.1 N/A 🗆 N/A Bank slope Sinuosity: Water velocity: Bank height (check one) (Approx.) Right: □Straight degrees Left: Meandering degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water □Other: Clear □Algal (check one) □Turbid □Sheen □ Surface on surface scum ☐ Boulder Silt/ clay ☐ Organic Other: Substrate: □ Bedrock ☐ Cobble ☐ Gravel ☑ Sand (check all that apply)
% of Substrate: % Width of Riparian Zone: Vegetative Layers: ☐ Trees: Herbs (check all that apply) ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A in. in. in Dominant Bank Vegetation (list): Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: (check one) ☐ Natural Artificial, man-made ☐ Manipulated Stream Quality \*: L Low

(check one)

High

☐ Moderate



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.

from livestock or man. Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) OPEN WATER 800004 achallo



Waterbody scho004 facing north upstream.



Waterbody scho004 facing south downstream.



Waterbody scho004 facing east across bank.

Linear Waterbody Data Sheet Survey Description Waterbody ID: Project Name: Waterbody Name: Schoo UNTto Crew Member Initials: Photos: County/Parish: State: KM Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-05 Survey Type: Centerline □Other: (check one) □Re-Route ☐Access Road Physical Attributes Stream Classification: (check one) Perennial □ Ephemeral □Intermittent Waterbody Type: ☐ Ditch ☐ Other: (check one) □River ☐ Stream ☐ Canal OHWM OHWM Indicator: □Water 2 Shelving □Wrested □ Scouring ☐ Clear line Width: vegetation staining on bank ☐Soil characteristic change Height: ☐Bent, matted, or missing ☐Wrack line ☐ Abrupt plant □Litter and community change vegetation debris Depth of Water: Width of Waterbody - Top of Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Bank to Top of Bank: to Toe of Slope: Water Edge: N/A 🗆 N/A 🗆 Bank slope Bank height Sinuosity: Water velocity: (Approx.) (check one) Right: Right: Straight degrees I eft: □Meandering degrees N/A **Qualitative Attributes** Water Appearance: □Other: □No water □Turbid □Sheen ☐ Surface □Algal (check one) Clear mats on surface scum ☐ Other: ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand Silt/ clay ☐ Organic Substrate: □ Bedrock (check all that apply) % of Substrate: % Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: ☐ Saplings/Shrubs: Herbs Avg. DBH of Dominants: in. Dominant Bank Vegetation (list): Morella cerifera runus serotina rubrum Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): amerged aquatic Aquatic Organisms Observed (list): Mosquitofish T&E Species Observed (list): NIA Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): THOLOU Man-ma Tributary is: (check one) ☐ Manipulated ☐ Natural Artificial, man-made Stream Quality \*: (check one) High ☐ Moderate 1 Low

Waterbody	/ ID:
Sch	0005

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

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

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

Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) 5000004 Scho 605 5 cho006



Waterbody scho005 facing west upstream.



Waterbody scho005 facing east downstream.



Waterbody scho005 facing north across bank.

**Open Waterbody Data Sheet** Survey Description Waterbody Name: Waterbody ID: Project Name: ocho 00 CI=Mal/ MY County: Crew Member Initials: Photos: State: Company: NN Chesapeak K-M .. Tract Number(s): Nearest Milepost: Associated Wetland ID(s): 27-00 AN Survey Type: □ Centerline □Other: □Re-Route ☐Access Road (check one) Physical Attributes Waterbody Type: □Stock Pond □ Natural Pond □ Lake □ Reservoir □ Impoundment □ Oxbow Other: (check one) Hydrologic Regime: Permanently Flooded ☐ Semipermanently Flooded □ Seasonally Flooded □ Temporarily Flooded OHWM OHWM Indicator: Clear line □Water □ Shelving □Wrested □ Scouring staining on bank vegetation Height: Bent, matted, or missing □Wrack □ Litter and □ Abrupt plant □ Soil characteristic change community change vegetation line debris Bank slope (average): Depth of Water: Bank height (average): 2 degrees N/A Qualitative Attributes Water Appearance: □No water Turbid □ Clear ☐Other: (check one) □ Sheen □ Surface □ Algal mats on surface scum Substrate: ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand ☐ Silt/ clay ☐ Organic Other: □ Bedrock (check all that apply) % of Substrate: Vegetative Layers: Width of Riparian Zone: (check all that apply) ☐ Trees: Herbs ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A Dominant Bank Vegetation (list): Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): storm water bond Man made Waterbody is: (check one) ☐ Natural Artificial, man-made ☐ Manipulated Waterbody Quality \*: (check one) ☐ High ☐ Moderate ☐ Low

Waterbody ID:

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

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

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

surface sheen); heavy odor; severe barriers to fish movement; little to no aquatic habitat; severe disturbance from livestock or man. Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey boundary, and IDs of associated features) och 0002 dcho006 John 0001 Ac40005

LANCE SCHOOL SERVICE

#### Environmental Field Surveys Open Water Point Photo Page



Open Waterbody ocho001 facing northwest.



Open Waterbody ocho001 facing northeast.

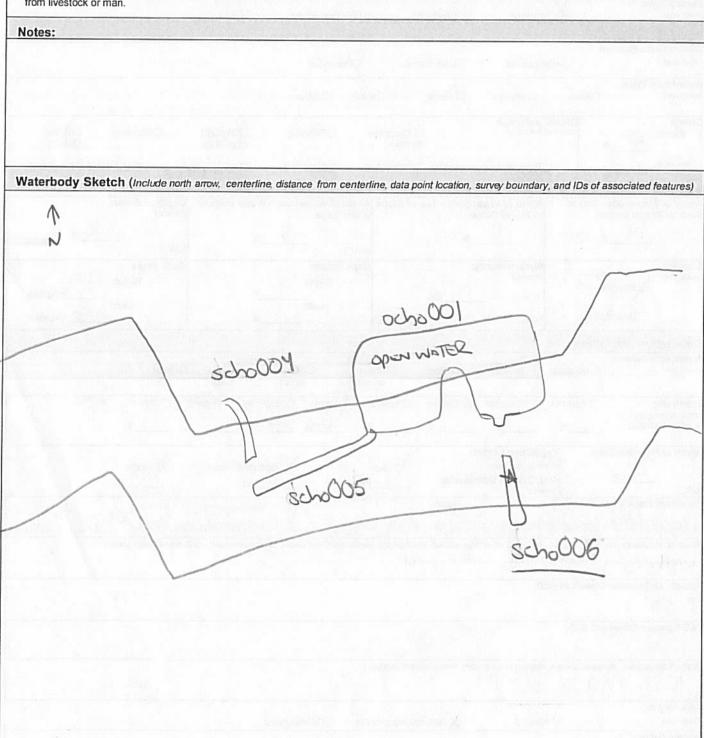
Linear Waterbody Data Sheet Survey Description Waterbody ID: Waterbody Name: Project Name: ACP to DED CROCK Schol 10 LINT Crew Member Initials: Photos: State: County/Parish: Cho (appel to Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-052 Survey Type: Centerline □Other: □Re-Route ☐Access Road (check one) Physical Attributes Stream Classification: (check one) □Perennial □ Ephemeral □Intermittent Waterbody Type: Ditch (check one) □River ☐ Stream ☐ Canal ☐ Other: OHWM OHWM Indicator: Wrested □Water □ Shelving □ Scouring Width: ☐ Clear line vegetation staining on bank Litter and ☐Soil characteristic change Height: ☐Bent, matted, or missing ☐Wrack line ☐Abrupt plant community change Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Water Edge: Bank to Top of Bank: to Toe of Slope: N/A 🗆 N/A 🗆 Sinuosity: Bank slope Water velocity: Bank height (Approx.) (check one) Right: Straight degrees fps Left: degrees □Meandering N/A Qualitative Attributes Water Appearance: □No water □Algal □Other: Clear □Turbid □Sheen □Surface (check one) on surface scum mats ☐ Other: Silt/ clay Organic Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel Sand
 San (check all that apply)
% of Substrate: % Width of Riparian Zone: Vegetative Layers: Herbs Saplings/Shrubs: (check all that apply) ☐ Trees: Avg. DBH of Dominants: Dominant Bank Vegetation (list): Liguidambour Ctyrauflud Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): overhanging vegetation, leaf packs Aquatic Organisms Observed (list): T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: ☐ Natural Artificial, man-made (check one) ☐ Manipulated Stream Quality \*: (check one) ☐ High ☐ Moderate Low

Waterbody	ID:		1410
SCIA	01	NO	1

\* 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.





Waterbody schooof facing south upstream.



Waterbody scho006 facing north downstream.



Waterbody scho006 facing east across bank.

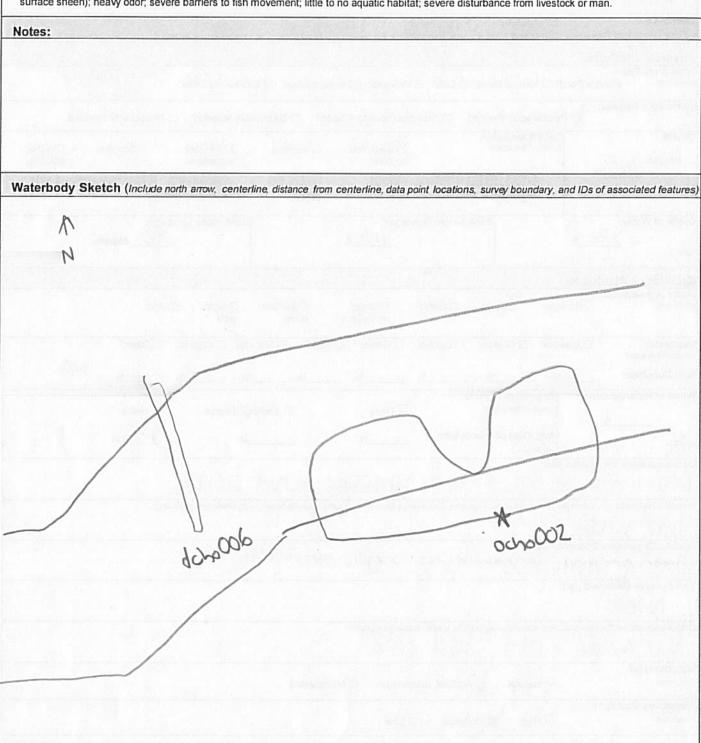
Open Waterbody Data Sheet Survey Description Waterbody ID: Project Name: Waterbody Name: ocho 002 HUNDME Crew Member Initials: Photos: State: County: Company: Chesapea M.S.I Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-055 Survey Type: □Other: **⊠**Centerline (check one) ☐Re-Route ☐ Access Road Physical Attributes Waterbody Type: check one) □Stock Pond □ Natural Pond □ Lake □ Reservoir □ Impoundment □ Oxbow Hydrologic Regime: ☐ Semipermanently Flooded ☐ Seasonally Flooded □ Temporarily Flooded Permanently Flooded онум **OHWM Indicator:** Clear line □ Shelving □Wrested □ Scouring □Water vegetation staining Height: on bank ⊠Bent, matted, or missing □Wrack □ Abrupt plant □ Soil characteristic change □Litter and debris community change Bank slope (average): Depth of Water: Bank height (average): NA A. degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water Other: (check one) □Turbid □Sheen □ Surface □Algal on surface scum mats Substrate: ☐ Bedrock ☐ Silt/ clay ☐ Organic ☐ Other: ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand (check all that apply) NA % of Substrate: Width of Riparian Zone: Vegetative Layers: M Herbs ☐ Trees: (check all that apply) ☐ Saplings/Shrubs: Avg. DBH of Dominants: NA Dominant Bank Vegetation (list): and maintained Aquatic Habitats (ex. submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Deep wo Aquatic Organisms Observed (list): Paper pondshell, largemouth bass, bluegill, mosquito fish T&E Species Observed (list): JON Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Waterbody is: (check one) ☐ Natural Artificial, man-made ☐ Manipulated Waterbody Quality \*: (check one) ☐ High Moderate ☐ Low

Waterb	ody ID:
	-COD-alm

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

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

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



## Environmental Field Surveys Open Water Point Photo Page



Open Waterbody ocho002 facing northeast.



Open Waterbody ocho002 facing northwest.

Linear Waterbody Data Sheet Survey Description Waterbody ID: Waterbody Name: Project Name: DEED COREK HNTTO Crew Member Initials: Photos: County/Parish: State: Company Associated Wetland ID(s): Tract Number(s): Nearest Milepost: Survey Type: Centerline □Re-Route □Access Road □Other: (check one) Physical Attributes Stream Classification: (check one) □ Ephemeral □Intermittent ☑ Perennial Waterbody Type: ☐ Other: Ditch ☐ Canal (check one) □River □ Stream оним **OHWM Indicator: ⊠**Water Wrested □ Scouring Width: ☐ Clear line □ Shelving staining on bank vegetation Height: ☐Soil characteristic change ☐Bent, matted, or missing ☐Wrack line ☐Abrupt plant ☐Litter and debris community change N/A 🗆 Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: to Toe of Slope: Water Edge: N/A N/A 🗆 Bank slope Sinuosity Bank height Water velocity: Approx.) (check one) Right: **⊠**Straight degrees fps □Meandering degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water Clear □Turbid □Sheen □ Surface □Algal □Other: (check one) on surface scum mats ☐ Silt/ clay ☐ Organic Other: □ Sand Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble □ Gravel (check all that apply) 106 % % of Substrate: Width of Riparian Zone: Vegetative Layers: Herbs (check all that apply) ☐ Trees: ☐ Saplings/Shrubs: Avg. DBH of Dominants: in N/AD Dominant Bank Vegetation (list): Rubus argutus cerifera Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): T&E Species Observed (list): MON Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Tributary is: (check one) ☐ Natural □ Manipulated Artificial, man-made Stream Quality \*: (check one) ☐ High Low □ Moderate

Waterbody ID:

<sup>a</sup> 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

from livestock or man. Notes: Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point location, survey boundary, and IDs of associated features) WCho OOD 50000B & scholo



Waterbody scho007 facing north upstream.



Waterbody scho007 facing south downstream.



Waterbody scho007 facing west across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: 10/16/ ACP Cacel County/Parish: Photos: State: Company: Crew Member Initials: Associated Wetland ID(s): Nearest Milepost: Tract Number(s): Survey Type: Centerline (check one) □Re-Route ☐Access Road □Other: Physical Attributes Stream Classification: (check one) □ Ephemeral □Intermittent Perennial Waterbody Type: (check one) Ditch ☐ Canal ☐ Other: □ Stream □River OHWM **OHWM Indicator:** Wrested □Water □ Scouring □ Shelving □ Clear line Width: staining vegetation on bank Height: □ Abrupt plant ☐Soil characteristic change ☐Bent, matted, or missing ☐Wrack line ☐ Litter and community change debris N/A 🗆 Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: to Toe of Slope: Water Edge: N/A 🗆 N/A 🗆 Bank slope Bank height Sinuosity: Water velocity: Right: ⊠Straight degrees fps □Meandering degrees Qualitative Attributes Water Appearance: Algal (check one) □No water □ Clear □Turbid □Sheen □Surface ☐Other: mats on surface scum ☐ Gravel □ Organic Other: ☐ Boulder ☐ Cobble ☐ Sand ☐ Silt/ clay Substrate: ☐ Bedrock (check all that apply) % of Substrate: Vegetative Layers: Width of Riparian Zone: (check all that apply) ☐ Trees: ☐ Saplings/Shrubs: Herbs Avg. DBH of Dominants: N/A in. Dominant Bank Vegetation (list): Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): Aquatic Organisms Observed (list): Mosquitofish T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes):

Tributary is: (check one)

Stream Quality \*:

☐ Natural

☐ High

Artificial, man-made

□ Moderate

☐ Manipulated

Low

Wa	terbody ID:	~ -
	schoo	09

<sup>a</sup> 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.

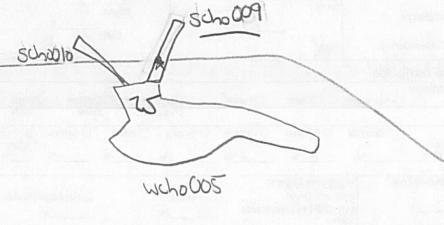
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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N	o	п	е	5	Ξ	

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

1





Waterbody school9 facing northeast upstream.



Waterbody schooo9 facing southwest downstream.



Open Waterbody D	ata Sheet					AN ADDRESS OF SOME STATE OF SOME
Survey Description						
Project Name:	Waterbody	Name:	And the second s	Waterbody ID:	Date:	1.
ACP	101	1D		ocho 003	10/2	-0/15
State: Cou	ecapeake	Company:		w Member Initials:	Photos: SEISW	
Tract Number(s):		Nearest Milepost:		Associated Wetland	ID(s):	
27-116,27-	-117	76.3		N/A		
Survey Type: (check one)	☑ Centerline 🕽	Re-Route	□Access Road	□Other:		
Physical Attributes	position of the control of the contr					
Waterbody Type: (check one) Stock Po	ond □ Natural Pond □ L	.ake Reservoir	Impoundment [	□ Oxbow □ Other:		
Hydrologic Regime:	Permanently Flooded	☐ Semipermanently	Flooded   Sea	asonally Flooded	Temporarily Flooded	Į.
онwм	OHWM Indicator: (check all that apply)	Clear line	e □Shelving	□Wrested	Scouring	□Water
Height:	(Silver an inal approy)	on bank	Sileiving	vegetation	_ Scouring	staining
ft.	□Bent, matted, or vegetation	missing	□Litter and debris	d □Abrupt plan community ch	t □Soil characteristi ange	c change
Depth of Water:	Bank hei	ght (average):		Bank slope (ave	rage):	
N/A 2 2 ft			ft.		40 degrees	
Qualitative Attributes	S					
Water Appearance: (check one)	water □Clear	Turbid □Sheer on surfa		ce □Algal □ mats	Other:	
Substrate:    B	edrock 🗆 Boulder 🗆	Cobble   Gravel	/ /	Silt/ clay	☐ Other:	
% of Substrate:	%%	%%	89 % 11	<u>5</u> %%	%	
Width of Riparian Zone:	Vegetative Layers:		1 No. 10 No.		V	
ft-	(check all that apply)	☐ Trees:	□ Sa	aplings/Shrubs:	Herbs	
N/AX	Avg. DBH of Dominar (approx.)	its:in.		in.	$\frac{\mathcal{W}/f}{}$ in.	
Dominant Bank Vegetatio	n (list):	Λ	ne's lain.		atingd are	ss/horbs
Liquidambar	styraciflua,	Andropogor	1 Virginizus	5, moweayma	Marked gra	3)/16103
Aquatic Habitats (ex: subme	rged or emerged aquatic vegetation	, overhanging banks/roots, le	af packs, large submerg	ed wood, riffles, deep pools,	etc.):	
DOOD Stand	in a water					
Aquatic Organisms Obser	ved (list):					
T&E Species Observed (lis	st):					
None		The second persons and the second persons and the second persons and the second persons are second persons and the second persons are second perso				
Disturbances (ex: livestock	access, manure in waterbody,	waste discharge pipes):	band			
Waterbody is:	□ Natural Martifi	oial man mada	Manipulated			
	- Natural DO Artific	cial, man-made	Manipulated			
Waterbody Quality *: (check one)	☐ High ☐ Modera	ite KLow				

Waterbody	ID:
orka	002

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

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

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

erbody Sketc	h (Include north an	row, centerline, distance fr	om centerline, data point locat	ions, survey boundary, and	d IDs of associated i
1					
N					
				+	
			dota Poir	_ = = -	
			( ocho	003	
		e naviger dest distance from except ( ) official ( paradiffuser this dist distance and officials ( ) is designed.	a dia make-salay mentang managang mang managa-salay Aprilandahan (1977). 2021	Million and the first the first recent selections of the selection of the	

The state of the s



Waterbody ocho003 facing southeast.



Waterbody ocho003 facing southwest.

Linear Waterbody Data Shee							
Survey Description							
Project Name:	Waterbody Name	):		7508	aterbody ID:		Date:
ACP	LINT to	Desa	Coole	(	Schollz	_	12/15/15
State:   County/Parish:	C	ompany:	Individual to the	Crew N	Member Initials:	Photos:	AND REAL PROPERTY.
VA Chesap		ESI		R	T, LR	W, I	=15
Tract Number(s):	N	earest Mile			Associated Wetl	and ID(s):	
27-177		8	1.0		NA		
Survey Type: (check one) — Centerline	e □Re-Ro	ute	□Access Road		□Other:		
Physical Attributes							
Stream Classification: (check one)	al   Mintermi	ittent	□Perennial				
Waterbody Type: (check one) □River □ Str	eam Ditch	□ Ca	nal		(=) (() (() () () () () () () () () () ()		
OHWM Indica (check all that appl)		Clear line on bank	e □Shelving	9	□Wrested vegetation	Scourin	g \bullet Water staining
N/A□ft. vegetation			debris		□ Abrupt plant community chan		haracteristic change
Width of Waterbody - Top of Bank to Top of Bank: to Toe	of Waterbody - To of Slope: ft.		Water Edge:	ody - W	t.	pth of Wate	r: ft.
Sinuosity: (check one)  Straight  Meandering  N/A	velocity:		N/A□ Bank height Right: Left:	Z + Z +	Ba	nk slope Right	00 degrees
Qualitative Attributes							
Water Appearance:	Clear □Turbid	□She on:	een □Sur surface scu		□Algal □0 mats	Other:	
Substrate: ☐ Bedrock ☐ Be	ulder   Cobble	☐ Grave	I ⊠ Sand À	Silt/ c	lay   Organic	☐ Other:	
(check all that apply) % of Substrate:%	_%%		% 30 %	70	%%	%	
Width of Riparian Zone: Vegetative (check all that Avg. DBH (approx.)		✓ Trees:	)a in	Saplin	ngs/Shrubs: _in.	Herbs NA in	
Dominant Bank Vegetation (list):  Juncus effusus, L	iguidar	nbar	styra	ciff	va, Mor	-ella	cerifera
Aquatic Habitats (ex: submerged or emerge	d aquatic vegetation,	overhanging b	eanks/roots, leaf pac	ks, large	submerged wood, ri	files, deep poo	is):
Aquatic Organisms Observed (list):							
T&E Species Observed (list):							
none							
Disturbances (ex: livestock access, manure	n waterbody, waste d	ischarge pipe		11	-1 1-		
power line eas	ement	1 100	dside	di	721		
Tributary is: (check one)	⊠.Artifi	cial, man-ma	ade 🗆 Manipo	ulated	edisper type t		
Stream Quality <sup>a</sup> :		* 10000					
(check one) High	☐ Mode	erate	LLow				

Waterbo	dy ID:	Training.
00	Mad	112
SC.	MOU	10

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

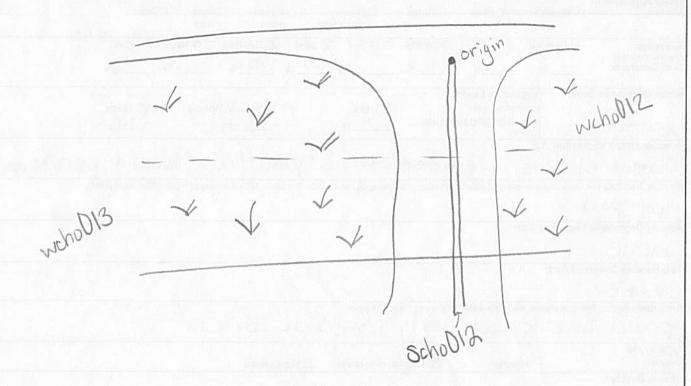
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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

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

Notes:

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

27





Waterbody scho012 facing west upstream.



Waterbody school2 facing east downstream.



Waterbody school2 facing south across bank.

Open waterbody D	ata Sneet				
Survey Description					
Project Name:	Waterbody	Name:	Waterbody II	):	Date:
ACP	4	by Bond	ocho	005	12/15/15
State: Cour	nesapeake	Company: ESI	Crew Member Init	100	ESW
7 (s): 27 - 177	-	Nearest Milepost:	Associated V	Vetland ID(s):	)
Survey Type: check one)	Centerline □	Re-Route □Acces	ss Road   Other:		1002-021-020-00-00-00-00-00-00-00-00-00-00-00-00
Physical Attributes					
Waterbody Type: (check one) Stock Po	nd □ Natural Pond □ L	ake 🗆 Reservoir 🗀 Impor	undment 🗆 Oxbow 🗅	Other:	
Hydrologic Regime:	Permanently Flooded	☐ Semipermanently Floode	d □ Seasonally Flood	ed 🗆 Tempora	rily Flooded
онwм	OHWM Indicator: (check all that apply)	\☑ Clear line	□Shelving □Wre	sted DSc	ouring □Water
Height: >3 ft	(order an eval appry)	on bank	vegeta		staining
	☐Bent, matted, or vegetation			upt plant □Soil unity change	characteristic change
Depth of Water:		ight (average):	Bank slo	pe (average):	
N/AD UNK.ft.		ft.		60	degrees
Qualitative Attributes	5				
Water Appearance: (check one) □ No	water ÓClear D	]Turbid □Sheen on surface	□Surface □Alga scum mats	□ Other:	
Substrate:   (check all that apply)	edrock 🗆 Boulder 🗆	Cobble ☐ Gravel ☐ Sa	and ☐ Silt/ clay ☐ C	rganic   Othe	UNK
% of Substrate:	%%	%%%	%%	%	_%
Width of Riparian Zone:	Vegetative Layers:	☐ Trees:	C Seelines/Shrubs	th North	
ft·			☐ Saplings/Shrub	′ \	
MAN/A	Avg. DBH of Domina:	nts:in.	in.	NA	_in.
Dominant Bank Vegetatio	n (list):				
mowed o	russes				
	rged or emerged aquatic vegetation	n, overhanging banks/roots, leaf packs	, large submerged wood, riffles, d	eep pools, etc.):	
Aquatic Organisms Obse					
none of	oserved				
T&E Species Observed (li				-	503110
none ?	observed				
Pond ins	access, manure in waterbody	waste discharge pipes):	ver plan-	has	
Waterbody is: (check one)			ipulated	44	
Waterbody Quality *: (check one)	☐ High ☐ Moder	rate /5-Low		1	

Waterbody	ID:
ochi	005

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

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

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

Notes: could not GPS waterbody. Could not cross fence at power plant Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey boundary, and IDs of associated features) och6005 ob railrour



Waterbody ocho005 facing southeast.



Waterbody ocho005 facing southwest.

Open Waterbody Data Sheet **Survey Description** Waterbody ID: Project Name: Waterbody Name: ocho004 HUNAMER Company: Crew Member Initials: Photos: State: County: NNE Associated Wetland ID(s): Tract Number(s): Nearest Milepost: 27-17 Survey Type: □Access Road □Other: □Centerline □Re-Route (check one) **Physical Attributes** Waterbody Type: Stock Pond □ Natural Pond □ Lake □ Reservoir □ Impoundment □ Oxbow □ Other: (check one) Hydrologic Regime: OHWM OHWM Indicator: Clear line □Wrested □ Scouring □Water □Shelving staining Height: on bank vegetation ☐Litter and □Abrupt plant □Soil characteristic change ☐Bent, matted, or missing ☐Wrack vegetation community change Bank height (average): Bank slope (average): Depth of Water: degrees N/A 🗆 Qualitative Attributes Water Appearance: □No water Clear □Turbid □ Surface □Algal Other: (check one) □Sheen mats on surface scum ☑ Sand Silt/ clay Organic Other: Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble □ Gravel (check all that apply) % of Substrate: Vegetative Layers: Width of Riparian Zone: (check all that apply) ☐ Trees: ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A Dominant Bank Vegetation (list): mowed grasses australis, Aquatic Habitats (ex. submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): observed Aquatic Organisms Observed (list): observed T&E Species Observed (list): Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): near old railroad bed on Waterbody is: ☐ Natural (check one) Artificial, man-made ☐ Manipulated Waterbody Quality :: ☐ High (check one) Low □ Moderate

Waterboo	y ID:	
DC	ho	004

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

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

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

Notes:	
Waterbody Sketch (Include north arrow, centerline, distance from centerline, data point locations, survey	boundary, and IDs of associated feature
Water body Sketch (Michide Hotal arrow, Centerling distance from Centerline, data point locations, data y	
	2 CAN COLD TO SE
Ac at the contract of the cont	
ocho004	
- LL particoad	
old Fairrows	Million manual Control of the Contro
old railroad  V V V V V V	menuticementalis /Com
	wcho014



Waterbody ocho004 facing north.



Waterbody ocho004 facing northeast.

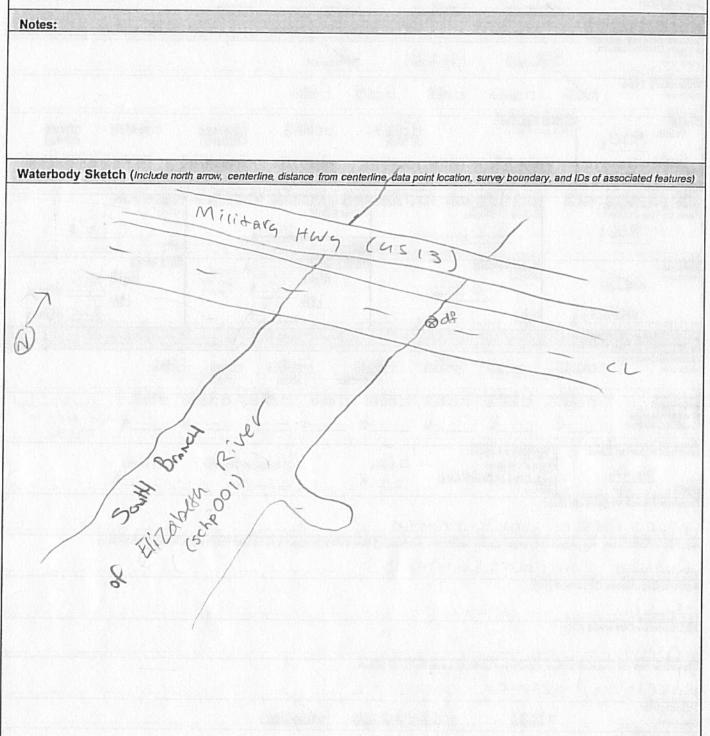
Linear Waterboo	y Data Sneet					
Survey Descriptio	n					D-A
Project Name:	42 T	Waterbody Na	me: South Br	anch	Waterbody ID:	Date:
ACP		of Eli-	LAbeth River	2	schp C	12/11/15
State:	County/Parish:	1 011	Company:	4	Crew Member Initial:	s: Photos: facing
Λ Δ.	Chesape	-60	ESI-		MKSIKSM	1 1 5 0 1 9
17	Chesapea	e re			And the second s	W/E/N
Tract Number(s):		27 177	Nearest Milepost:	-	Associated V	Vetland ID(s):
27-001-B212	, 27-005RF	2,21-17+	8	1.9	NA	
Survey Type:						
(check one)	⊠Centerline	□Re-l	Route $\square A$	Access Road	□Other:	
Physical Attribute	S					
Stream Classification:				/		
(check one)	Ephemera	I □Inte	mittent 🖽	erennial		
Waterbody Type:	/					
(check one)	IRiver □ Stre	eam 🗆 Dite	ch 🗆 Canal	☐ Other:		
OHWM	OHWM Indicat	or:	/		100 years 100 years 100	
Width: 840 ft.	(check all that apply		☑ Clear line	□Shelving		☐Scouring ☐Water staining
ft.	1		on bank		vegetation	stanning
Height: 30			g □Wrack line	□Litter an		
N/A□ft.	vegetatio	n		debris	community c	hange
Width of Waterbody - 1	Top of Width	of Waterbody -	Toe of Slope Widt	h of Waterbo	ody - Water Edge to	Depth of Water:
Bank to Top of Bank:		of Slope:	Wate	r Edge:		(Approx.)
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	-		N/AE			N/A□
Sinuosity:	Water	velocity:	Bank	height	* *above	Bank slope
(check one)	(Approx.)	0 5		Right:	6 water	Right: 45
LE Straight		0.5	ps	Left:	ext. level	l eft: O c)
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Water Appearance:	No water □C	lear DTurt	oid □Sheen	□Sur	face □Algal	□Other:
(5.100.10.10.7)	-110 Water	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	on surfa			
Substrate:	Bedrock □ Bo	ulder   Cobl	ole   Gravel   Gravel	Sand [	☐ Silt/ clay ☐ Organi	c Other: undetermined
(check all that apply)	Dedition L Do					too deep to
% of Substrate:	%	_%	%%	%	%	% % too deep to check.
Width of Riparian Zone	e: Vegetative	Lavers:				
	(check all that	7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	☐ Trees:		Saplings/Shrubs:	☐ Herbs
ZIOUD ft.		of Dominants:	in.		in.	in.
N/A□ Dominant Bank Vegeta	(approx.)					•
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none Pre	sent, be	ulk-he	odec			
Aquatic Habitats (ex: s	ubmerged or emerged	aquatic vegetation	n, overhanging banks/	roots, leaf paci	ks, large submerged woo	d, riffles, deep pools):
Wooden	Structur	es (bulk	head)			
Aquatic Organisms Of		( (				
	Jael veu (IISI):					
Kish						
T&E Species Observe	d (list):					
none						
Disturbances (ex: lives)	nck access manure i	n waterbody was	e discharge pines):			8.0
dredging	, narden	ed Sh	weine			
Tributary is:				./		
(check one)	□ Natural	□ Aı	tificial, man-made	☐ Manipu	ulated	
Stream Quality *:						
(check one)	☐ High	□M	oderate	☐ Low		

Waterbo	dy	ID	:
50	h	P	00

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.

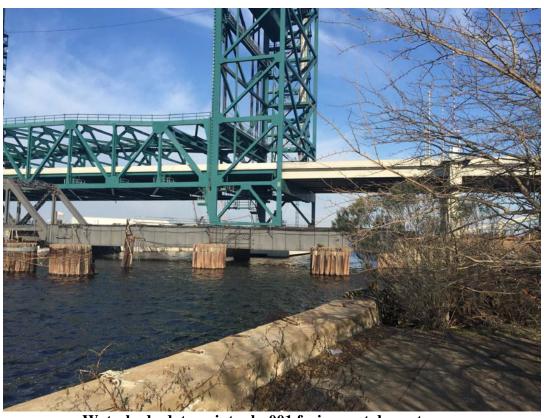
Moderate Quality: Altered channel evidenced by rip-rap; natural vegetation extends 1/3-1/2 of the active channel width on each side; filtering function or riparian vegetation only moderately compromised; banks moderately unstable; water color is cloudy, submerged objects covered with greenish film; moderate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





Waterbody data point schp001 facing west upstream.



Waterbody data point schp001 facing east downstream.



Waterbody data point schp001 facing north across bank.

Linear Waterbody Data Sheet **Survey Description** Waterbody Name: Waterbody ID: Project Name: RIVER TMP Sch p 003 ACP to South Bronch Elizabeth Crew Member Initials: Photos: Kacino County/Parish: State: VA MKS, KSM EST-1 Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-005-RR, NA Survey Type: Re-Route □ Centerline □Access Road □Other: Physical Attributes Stream Classification: (check one) □ Ephemeral **□**Intermittent □Perennial Waterbody Type: Ditch Other: ☐ Canal (check one) □River □ Stream OHWM Indicator: OHWM □ Scouring ₩Water Shelving Clear line □Wrested Width: staining 6 vegetation □Litter and □Abrupt plant ☐Soil characteristic change Height: □Bent, matted, or missing □Wrack line community change vegetation debris Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Water Edge: Bank to Top of Bank: to Toe of Slope: ft. 0 N/A N/A 🗆 Bank slope Sinuosity: Water velocity: Bank height Approx.) (check one) Right: **⊠**Straight degrees degrees □Meandering N/A Qualitative Attributes Water Appearance: □No water **⊠Clear** □Turbid □Sheen □Surface □Algal □Other: (check one) on surface scum mats Silt/ clay Organic Sand Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: ☐ Saplings/Shrubs: Herbs (check all that apply) ☐ Trees: NA in. Avg. DBH of Dominants: Dominant Bank Vegetation (list): Andropogon Virginicas, Baccharis halimifolia

Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): none Aquatic Organisms Observed (list): observed none T&E Species Observed (list): none observed Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): none Tributary is: ☐ Natural (check one) Artificial, man-made ☐ Manipulated Stream Quality \*: High Moderate ☐ Low

(check one)

Waterbody ID: Schp 603

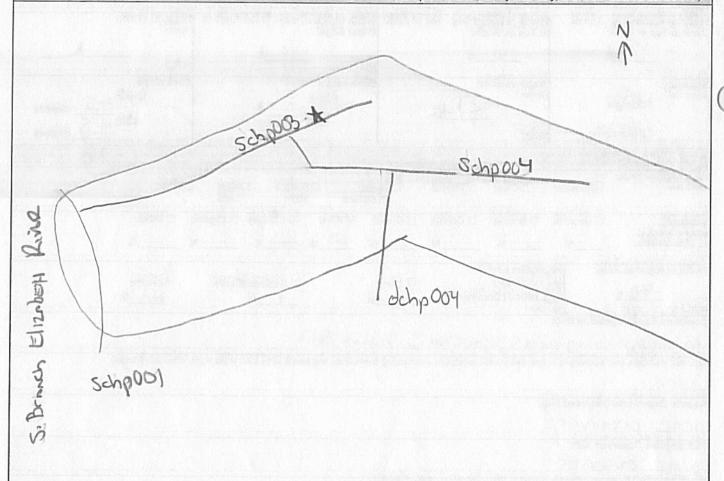
High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance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

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

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

Notes:

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





Waterbody data point schp003 facing north upstream.



Waterbody data point schp003 facing west downstream.



Waterbody data point schp003 facing east across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: RIVER 4NT to SOUTH BranCH Elizabath Crew Member Initials: Photos: Facino County/Parish: State: Chesapeake FST-1 Associated Wetland ID(s): Nearest Milepost: Tract Number(s): 27-005\_RR, 27-001-Bala Survey Type: Re-Route □Other: □ Centerline ☐Access Road (check one) Physical Attributes Stream Classification: □Intermittent □ Perennial (check one) □ Ephemeral Waterbody Type: Ditch ☐ Other: ☐ Canal ☐ Stream (check one) □River **OHWM Indicator:** OHWM Wrested □ Scouring Water ☑ Clear line □ Shelving Width: 6 staining vegetation on bank ft. Height: ☐ Abrupt plant ☐Soil characteristic change □Litter and □Bent, matted, or missing □Wrack line community change vegetation debris Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: to Toe of Slope: Water Edge: ft. 6 N/A N/A 🗆 Bank slope Bank height Sinuosity: Water velocity: Approx.) (check one) Right: □Straight degrees fps Meandering degrees N/AE Qualitative Attributes Water Appearance: □No water Clear □Turbid □Sheen □Surface □Algal □Other: (check one) mats on surface scum ☐-Silt/ clay ☐ Organic Sand ☐ Gravel ☐ Boulder ☐ Cobble Substrate: ☐ Bedrock (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: ☐ Saplings/Shrubs: (check all that apply) ☐ Trees: Herbs Avg. DBH of Dominants: N/A in. in. Dominant Bank Vegetation (list): Phragmites australis, Aster sp. (mowed)

Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools): (mowed none Aquatic Organisms Observed (list): observed NUNE T&E Species Observed (list): none observed Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Pipe Discharge Tributary is: ☐ Natural (check one) Artificial, man-made ☐ Manipulated Stream Quality \*:

(check one)

☐ High

☐ Moderate

Low

Schp OOL

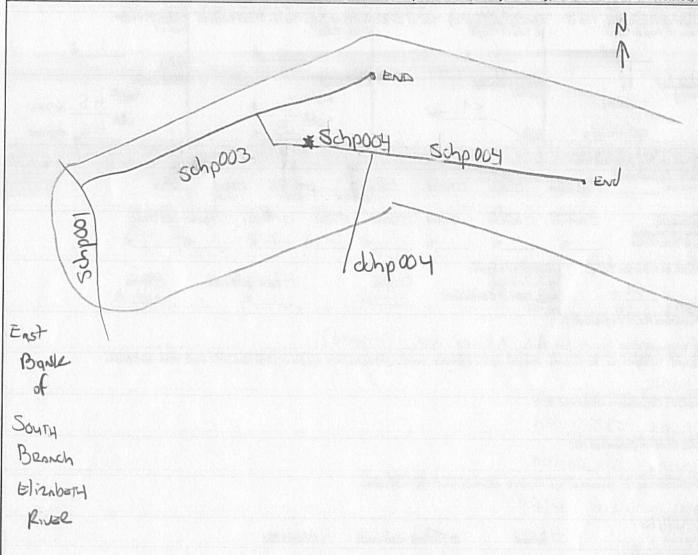
High Quality: Natural channel, natural vegetation extends at least one or two active channel widths on each side; banks stable and protected by roots; water color is clear to tea-colored; no barriers to fish movement; many fish cover types available; diverse and stable aquatic habitat; no disturbance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

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

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

Notes:

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





Waterbody data point schp004 facing southeast upstream.



Waterbody data point schp004 facing west downstream.

Photo Sheet 1 of 2



Waterbody data point schp004 facing northeast across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: **UNT** to Great Dismal p and Schrou Swamp Crew Member Initials: Photos: State: County/Parish: Company: Associated Wetland ID(s): Nearest Milepost: Tract Number(s): wchbool Survey Type: (check one) Centerline □Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) XEphemeral □Intermittent Perennial Waterbody Type: (check one) Other: ☐ Canal Ditch □ River ☐ Stream OHWM OHWM Indicator: **W** ater ☐ Clear line ☐ Shelving □Wrested ☐ Scouring Width: staining on bank vegetation Height: ☐Soil characteristic change □Bent, matted, or missing □Wrack line ☐ Litter and ☐ Abrupt plant community change debris N/AU Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: Water Edge: to Toe of Slope: N/AD N/A Bank height Bank slope Sinuosity: Water velocity: (check one) Right: Straight fps □ Meandering degrees N/A Qualitative Attributes Water Appearance: (check one) □ No water Clear Sheen ☐ Surface □Algal Other: □Turbid on surface scum Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble Sand Silt clay Organic (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: **K**Herbs ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A in. N/A Dominant Bank Vegetation (list): Phragmites australis, Typha latifolia 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): Tributary is: (check one) ☐ Natural Artificial, man-made □ Manipulated Stream Quality \*: (check one) ☐ High Moderate □ Low

Waterbody	ID:
0-1	-00

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.

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Notes:		
	NUMBER OF BOOK	REAL PROPERTY OF THE PROPERTY
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Waterbody Sketch (Inc.)	lude north arrow, centerline, distance from centerline, data point l	ocation, survey boundary, and IDs of associated features)
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Waterbody schr007 facing northwest upstream.



Waterbody schr007 facing northeast downstream.



Waterbody schr007 facing southeast across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: **UNT** to Great Dismal p and Schrou Swamp Crew Member Initials: Photos: State: County/Parish: Company: Associated Wetland ID(s): Nearest Milepost: Tract Number(s): wchbool Survey Type: (check one) Centerline □Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) XEphemeral □Intermittent Perennial Waterbody Type: (check one) Other: ☐ Canal Ditch □ River ☐ Stream OHWM OHWM Indicator: **W** ater ☐ Clear line ☐ Shelving □Wrested ☐ Scouring Width: staining on bank vegetation Height: ☐Soil characteristic change □Bent, matted, or missing □Wrack line ☐ Litter and ☐ Abrupt plant community change debris N/AU Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: Water Edge: to Toe of Slope: N/AD N/A Bank height Bank slope Sinuosity: Water velocity: (check one) Right: Straight fps □ Meandering degrees N/A Qualitative Attributes Water Appearance: (check one) □ No water Clear Sheen ☐ Surface □Algal Other: □Turbid on surface scum Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble Sand Silt clay Organic (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: **K**Herbs ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A in. N/A Dominant Bank Vegetation (list): Phragmites australis, Typha latifolia 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): Tributary is: (check one) ☐ Natural Artificial, man-made □ Manipulated Stream Quality \*: (check one) ☐ High Moderate □ Low

Waterbody	ID:
0-1	-00

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.

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Waterbody schr007 facing northwest upstream.



Waterbody schr007 facing northeast downstream.



Waterbody schr007 facing southeast across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: **UNT** to Great Dismal p and Schrou Swamp Crew Member Initials: Photos: State: County/Parish: Company: Associated Wetland ID(s): Nearest Milepost: Tract Number(s): wchbool Survey Type: (check one) Centerline □Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) XEphemeral □Intermittent Perennial Waterbody Type: (check one) Other: ☐ Canal Ditch □ River ☐ Stream OHWM OHWM Indicator: **W** ater ☐ Clear line ☐ Shelving □Wrested ☐ Scouring Width: staining on bank vegetation Height: ☐Soil characteristic change □Bent, matted, or missing □Wrack line ☐ Litter and ☐ Abrupt plant community change debris N/AU Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: Water Edge: to Toe of Slope: N/AD N/A Bank height Bank slope Sinuosity: Water velocity: (check one) Right: Straight fps □ Meandering degrees N/A Qualitative Attributes Water Appearance: (check one) □ No water Clear Sheen ☐ Surface □Algal Other: □Turbid on surface scum Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble Sand Silt clay Organic (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: **K**Herbs ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A in. N/A Dominant Bank Vegetation (list): Phragmites australis, Typha latifolia 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): Tributary is: (check one) ☐ Natural Artificial, man-made □ Manipulated Stream Quality \*: (check one) ☐ High Moderate □ Low

Waterbody	ID:
0-1	-00

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.

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Waterbody schr007 facing northwest upstream.



Waterbody schr007 facing northeast downstream.



Waterbody schr007 facing southeast across bank.

Linear Waterbody Data Sheet Survey Description Waterbody Name: Waterbody ID: Project Name: **UNT** to Great Dismal p and Schrou Swamp Crew Member Initials: Photos: State: County/Parish: Company: Associated Wetland ID(s): Nearest Milepost: Tract Number(s): wchbool Survey Type: (check one) Centerline □Re-Route ☐ Access Road □Other: Physical Attributes Stream Classification: (check one) XEphemeral □Intermittent Perennial Waterbody Type: (check one) Other: ☐ Canal Ditch □ River ☐ Stream OHWM OHWM Indicator: **W** ater ☐ Clear line ☐ Shelving □Wrested ☐ Scouring Width: staining on bank vegetation Height: ☐Soil characteristic change □Bent, matted, or missing □Wrack line ☐ Litter and ☐ Abrupt plant community change debris N/AU Width of Waterbody - Toe of Slope Width of Waterbody - Water Edge to Depth of Water: Width of Waterbody - Top of Bank to Top of Bank: Water Edge: to Toe of Slope: N/AD N/A Bank height Bank slope Sinuosity: Water velocity: (check one) Right: Straight fps □ Meandering degrees N/A Qualitative Attributes Water Appearance: (check one) □ No water Clear Sheen ☐ Surface □Algal Other: □Turbid on surface scum Substrate: ☐ Bedrock ☐ Boulder ☐ Cobble Sand Silt clay Organic (check all that apply) % of Substrate: Width of Riparian Zone: Vegetative Layers: (check all that apply) ☐ Trees: **K**Herbs ☐ Saplings/Shrubs: Avg. DBH of Dominants: N/A in. N/A Dominant Bank Vegetation (list): Phragmites australis, Typha latifolia 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): Tributary is: (check one) ☐ Natural Artificial, man-made □ Manipulated Stream Quality \*: (check one) ☐ High Moderate □ Low

Waterbody	ID:
0-1	-00

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.

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Waterbody schr007 facing northwest upstream.



Waterbody schr007 facing northeast downstream.



Waterbody schr007 facing southeast across bank.