

Summary of WAAs & Data Collected
Interim Riverine Forested Shrub Hydrogeomorphic Analysis Worksheet
BOA# 10225N-HGM

		Functional Capacity Units (FCU)		
	WAA Acentage	Physical	Biological	Chemical
WAA1- Existing	4.40	1.974	3.813	3.051
WAA1-Impacted	4.40	0.000	0.000	0.000
Total		1.97	3.81	3.05

Interim Riverine Forested Shrub Hydrogeomorphic Analysis Worksheet
(Project # 10225N-WD)

WAA 1 - Pre-Project Year "0"
Natural Conditions - Existing Site

Acreage = 4.40

Variable	Sub-Index	Notes
V _{dur}	0.10	In an average year all or portions of the WAA either floods and/or ponds for at least 1-7 consecutive days
V _{freq}	0.50	Floods or ponds 2 out of 5 years (100- year floodplain)
V _{topo}	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or other topographic features
V _{cwd}	1.00	More than 7 pieces of cwd greater than 3" diameter along 100' transect
V _{wood}	0.75	67 to 90 % of the WAA is covered with woody vegetation
V _{tree}	1.00	At least 60% of the stand is oak, hickory, cypress, maple and/or elm. Black willow, cottonwood, tallow and sycamore do not represent more than 5% of the stand.
V _{rich}	0.80	Four tree species present
V _{basal}	0.60	The average basal area of the WAA is between 60-80 square ft/acre
V _{density}	0.60	The WAA averages a tree density of 250-500 trees/acre OR 50-100 trees/acre
V _{mid}	0.25	Midstory coverage of the WAA is less than 10%
V _{herb}	0.50	Herbaceous cover in the WAA averages between 31-50%
V _{detritus}	1.00	Greater than 85% of the area possesses an O or A horizon
V _{redox}	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes.
V _{sorpt}	1.00	The WAA is dominated by montmorillonitic clayey soils (clay, clay loams, silty clay loams) or soils with high organic (2/1, 2/2, or 3/1)
V _{connect}	1.00	Wetland plus four habitats and/or surrounded by forested

Functional Capacity Index (FCI)

Physical	0.449
Biological	0.867
Chemical	0.693

Functional Capacity Units (FCU)

Physical	1.974
Biota	3.813
Chemical	3.051

Tree Calculations Data (Wetland 1)

Tree DBH and Basal Area		
Tree DBH (in.)	Tree Basal Area (Sq.Ft.)	Species
17.0	1.576	Quercus phellos
15.0	1.227	Quercus phellos
12.9	0.908	Quercus phellos
17.5	1.670	Quercus phellos
8.8	0.422	Quercus phellos
14.3	1.115	Quercus phellos
12.8	0.894	Quercus nigra
4.7	0.120	Ulmus alata
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
	0.000	
Total		
103.0	7.933	

Average Basal Area (Sq.Ft. per acre)	
Plot Size (Sq.ft.)	4356
Sq.ft. per acre	43560
Total Basal Area (Sq.ft.)	7.933
Total BA per acre	79.330

0.10 (30 ft radius plot)

Number of Trees (per acre)	
Plot Size (Sq.ft.)	4356
Number of Trees	8
Total number of trees per acre	80

0.10 (30 ft radius plot)

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WAA 1 - Post Construction

Acreage = 4.40

Variable	Sub-Index	Notes
V _{dur}	0.00	The area is NOT subject to flooding
V _{freq}	0.00	The area is not subject to flooding or ponding (500 yr floodplain)
V _{topo}	0.00	#N/A
V _{cwd}	0.00	#N/A
V _{wood}	0.00	#N/A
V _{tree}	0.00	#N/A
V _{rich}	0.00	#N/A
V _{basal}	0.00	#N/A
V _{density}	0.00	#N/A
V _{mld}	0.00	#N/A
V _{herb}	0.00	#N/A
V _{detrilus}	0.00	#N/A
V _{redox}	0.00	#N/A
V _{sorpt}	0.00	#N/A
V _{connect}	0.00	#N/A

Functional Capacity Index (FCI)

Physical	0.000
Biological	0.000
Chemical	0.000

Functional Capacity Units (FCU)

Physical	0.000
Biota	0.000
Chemical	0.000