

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: VA_97		RUFFINS POND DAM	E.H. Mills Memorial Dam	
Diadromous Tier	1			
Brook Trout Tier	N/A			
Resident Tier	1			
NID ID	VA17715			
State ID	97			
River Name	Massaponax Creek			
Dam Height (ft)	23			
Dam Type	Gravity			
Latitude	38.2457			
Longitude	-77.4026			
Passage Facilities	None Documented			
Passage Year	N/A			
Size Class	1b: Creek (3.861 - 38.61 sq mi)			
HUC 12	Massaponax Creek			
HUC 10	Massaponax Creek-Rappahanno			
HUC 8	Lower Rappahannock			
HUC 6	Lower Chesapeake			
HUC 4	Lower Chesapeake			

Landcover			
NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	11.01	% Tree Cover in ARA of Upstream Network	72.88
% Natural Cover in Upstream Drainage Area	50.27	% Tree Cover in ARA of Downstream Network	62.07
% Forested in Upstream Drainage Area	31.48	% Herbaceous Cover in ARA of Upstream Network	17.46
% Agriculture in Upstream Drainage Area	6.36	% Herbaceous Cover in ARA of Downstream Network	28.22
% Natural Cover in ARA of Upstream Network	66.61	% Barren Cover in ARA of Upstream Network	0.2
% Natural Cover in ARA of Downstream Network	61.15	% Barren Cover in ARA of Downstream Network	0.27
% Forest Cover in ARA of Upstream Network	31.48	% Road Impervious in ARA of Upstream Network	2.8
% Forest Cover in ARA of Downstream Network	38.92	% Road Impervious in ARA of Downstream Network	0.91
% Agricultural Cover in ARA of Upstream Network	5.29	% Other Impervious in ARA of Upstream Network	4.14
% Agricultural Cover in ARA of Downstream Network	32.21	% Other Impervious in ARA of Downstream Network	1.01
% Impervious Surf in ARA of Upstream Network	6		
% Impervious Surf in ARA of Downstream Network	1.05		

Metric descriptions can be found at:

http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf

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Network, System Type and Condition					
Functional Upstream Network (mi)	112.29	Upstream Size Class Gain (#)	0		
Total Functional Network (mi)	3441.3	# Downsteam Natural Barriers	0		
Absolute Gain (mi)	112.29	# Downstream Hydropower Dams	0		
# Size Classes in Total Network	5	# Downstream Dams with Passage	0		
# Upstream Network Size Classes	2	# of Downstream Barriers	0		
NFHAP Cumulative Disturbance Index		Not Scored / Unavailable at this scale			
Dam is on Conserved Land		No			
% Conserved Land in 100m Buffer of Upstream Network		3.73			
% Conserved Land in 100m Buffer of Downstream Network		20.81			
Density of Crossings in Upstream Network Watershed (#/m2)		2.21			
Density of Crossings in Downstream Network Watershed (#/m2)		0.91			
Density of off-channel dams in Upstream Network Watershed (#/m2)		0			
Density of off-channel dams in Downstream Network Watershed (#/m2)		0			
Diadromous Fish					
Downstream Alewife	Current	Downstream Striped Bass	None Documented		
Downstream Blueback	Current	Downstream Atlantic Sturgeon	None Documented		
Downstream American Shad	None Documented	Downstream Shortnose Sturgeon	None Documented		
Downstream Hickory Shad	None Documented	Downstream American Eel	Current		
Presence of 1 or More Downstream Anadromous Species		Current			
# Diadromous Species Downstream (incl eel)		3			
Resident Fish			Stream Health		
Barrier is in EBTJV BKT Catchment	No	Chesapeake Bay Program Stream Health	GOOD		
Barrier is in Modeled BKT Catchment (DeWeber)	No	MD MBSS Benthic IBI Stream Health	N/A		
Barrier Blocks an EBTJV Catchment	Yes	MD MBSS Fish IBI Stream Health	N/A		
Barrier Blocks a Modeled BKT Catchment (DeWeber)	No	MD MBSS Combined IBI Stream Health	N/A		
Native Fish Species Richness (HUC8)	58	VA INSTAR mIBI Stream Health	High		
# Rare Fish (HUC8)	2	PA IBI Stream Health	N/A		
# Rare Mussel (HUC8)	2				
# Rare Crayfish (HUC8)	0				

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