Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_594** **MATTAWAN ASSOCIATION DAM**

Bay-wide Diadromous Tier	3
Bay-wide Resident Tier	4
Bay-wide Brook Trout Tier	N/A
NID ID	VA08539
State ID	594
River Name	
Dam Height (ft)	27
Dam Type	Gravity
Latitude	37.6572
Longitude	-77.3225
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Totopotomoy Creek
HUC 10	Upper Pamunkey River
HUC 8	Pamunkey
HUC 6	Lower Chesapeake
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.94
% Natural Cover in Upstream Drainage Area	74.76
% Forested in Upstream Drainage Area	59.91
% Agriculture in Upstream Drainage Area	14.78
% Natural Cover in ARA of Upstream Network	84.78
% Natural Cover in ARA of Downstream Network	76.09
% Forest Cover in ARA of Upstream Network	69.78
% Forest Cover in ARA of Downstream Network	32.03
% Agricultral Cover in ARA of Upstream Network	4.57
% Agricultral Cover in ARA of Downstream Network	19.65
% Impervious Surf in ARA of Upstream Network	0.85
% Impervious Surf in ARA of Downstream Network	0.68

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	68.71
% Tree Cover in ARA of Downstream Network	65.24
% Herbaceaous Cover in ARA of Upstream Network	14.79
% Herbaceaous Cover in ARA of Downstream Network	23.41
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.11
% Road Impervious in ARA of Upstream Network	1.92
% Road Impervious in ARA of Downstream Network	0.61
% Other Impervious in ARA of Upstream Network	5.92
% Other Impervious in ARA of Downstream Network	1.09

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)	1.24	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	1343.37	# Downsteam Natural Barriers	0
Absolute Gain (mi)	1.24	# Downstream Hydropower Dams	0
# Size Classes in Total Network	5	# Downstream Dams with Passage	0
# Upstream Network Size Classes	1	# of Downstream Barriers	0

NFHAP Cumulative Disturbance Index	Very High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	0
% Conserved Land in 100m Buffer of Downstream Network	6.63
Density of Crossings in Upstream Network Watershed (#/m2)	1.37
Density of Crossings in Downstream Network Watershed (#/m2)	0.59
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

Barrier is in EBTJV BKT Catchment	No
Barrier is in Modeled BKT Catchment (DeWeber)	No
Barrier Blocks an EBTJV Catchment	No
Barrier Blocks a Modeled BKT Catchment (DeWeber)	No
Native Fish Species Richness (HUC8)	56
# Rare Fish (HUC8)	1
# Rare Mussel (HUC8)	3
# Rare Crayfish (HUC8)	0

Stream Health

Chesapeake Bay Program Stream Health	FAIR
MD MBSS Benthic IBI Stream Health	N/A
MD MBSS Fish IBI Stream Health	N/A
MD MBSS Combined IBI Stream Health	N/A
VA INSTAR mIBI Stream Health	Outstanding
PA IBI Stream Health	N/A

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