

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_404**

MOTOAKA DAM

Bay-wide Diadromous Tier	3
Bay-wide Resident Tier	5
Bay-wide Brook Trout Tier	N/A
NID ID	VA09510
State ID	404
River Name	College Creek
Dam Height (ft)	24
Dam Type	Earth
Latitude	37.2638
Longitude	-76.7222
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	College Creek
HUC 10	Lawnes Creek-James River
HUC 8	Lower James
HUC 6	James
HUC 4	Lower Chesapeake



Landcover

NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	17.1	% Tree Cover in ARA of Upstream Network	68.75
% Natural Cover in Upstream Drainage Area	56.01	% Tree Cover in ARA of Downstream Network	59.94
% Forested in Upstream Drainage Area	49.6	% Herbaceous Cover in ARA of Upstream Network	8.49
% Agriculture in Upstream Drainage Area	0.82	% Herbaceous Cover in ARA of Downstream Network	13.22
% Natural Cover in ARA of Upstream Network	72.85	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	82.3	% Barren Cover in ARA of Downstream Network	0
% Forest Cover in ARA of Upstream Network	51.13	% Road Impervious in ARA of Upstream Network	3.42
% Forest Cover in ARA of Downstream Network	27.79	% Road Impervious in ARA of Downstream Network	1.82
% Agricultural Cover in ARA of Upstream Network	1.59	% Other Impervious in ARA of Upstream Network	7.16
% Agricultural Cover in ARA of Downstream Network	2.23	% Other Impervious in ARA of Downstream Network	2.15
% Impervious Surf in ARA of Upstream Network	8.66		
% Impervious Surf in ARA of Downstream Network	2.19		

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)	5.71	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	49.68	# Downstream Natural Barriers	0
Absolute Gain (mi)	5.71	# Downstream Hydropower Dams	0
# Size Classes in Total Network	3	# 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	Yes		
% Conserved Land in 100m Buffer of Upstream Network	77.89		
% Conserved Land in 100m Buffer of Downstream Network	21.34		
Density of Crossings in Upstream Network Watershed (#/m2)	0.81		
Density of Crossings in Downstream Network Watershed (#/m2)	0.99		
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
One or More DS Anadromous Species	Current	# Diadromous Sp Dnstrm (incl eel)	3

Resident Fish and Rare Species

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)	62
# Rare Fish (HUC8)	2
# Rare Mussel (HUC8)	1
# Rare Crayfish (HUC8)	0
Globally rare or fed listed fish/mussel sp HUC12	No
Globally rare or fed listed fish/mussel sp in upstream or downstream functional network	No

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	High
PA IBI Stream Health	N/A

Rare fish or mussel sp in HUC12	No
Rare fish or mussel in upstream or downstream functional network	No

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