Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_958** **CUSHAW**

Bay-wide Diadromous Tier	4
Bay-wide Resident Tier	1
Bay-wide Brook Trout Tier	N/A
NID ID	VA00901
State ID	958
River Name	James River
Dam Height (ft)	26
Dam Type	Gravity
Latitude	37.5931
Longitude	-79.3826
Passage Facilities	None Documented
Passage Year	N/A
Size Class	3b: Medium Mainstem River (1,
HUC 12	Otter Creek-James River
HUC 10	Reed Creek-James River
HUC 8	Middle James-Buffalo
HUC 6	James
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.72
% Natural Cover in Upstream Drainage Area	82.64
% Forested in Upstream Drainage Area	81.15
% Agriculture in Upstream Drainage Area	12.05
% Natural Cover in ARA of Upstream Network	76.44
% Natural Cover in ARA of Downstream Network	89.71
% Forest Cover in ARA of Upstream Network	73.79
% Forest Cover in ARA of Downstream Network	78.02
% Agricultral Cover in ARA of Upstream Network	14.36
% Agricultral Cover in ARA of Downstream Network	0
% Impervious Surf in ARA of Upstream Network	1.46
% Impervious Surf in ARA of Downstream Network	1.24

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	79.82
% Tree Cover in ARA of Downstream Network	88.07
% Herbaceaous Cover in ARA of Upstream Network	16.17
% Herbaceaous Cover in ARA of Downstream Network	0.25
% Barren Cover in ARA of Upstream Network	0.07
% Barren Cover in ARA of Downstream Network	0.01
% Road Impervious in ARA of Upstream Network	1.21
% Road Impervious in ARA of Downstream Network	0.89
% Other Impervious in ARA of Upstream Network	1.07
% 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)	4242.77	Upstream Size Class Gain (#)	3
Total Functional Network (mi)	4252.47	# Downsteam Natural Barriers	0
Absolute Gain (mi)	9.7	# Downstream Hydropower Dams	7
# Size Classes in Total Network	5	# Downstream Dams with Passage	4
# Upstream Network Size Classes	5	# of Downstream Barriers	10

NFHAP Cumulative Disturbance Index	Low
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	44.34
% Conserved Land in 100m Buffer of Downstream Network	80.44
Density of Crossings in Upstream Network Watershed (#/m2)	1.42
Density of Crossings in Downstream Network Watershed (#/m2)	0.77
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	Historical	Downstream Striped Bass	None Documented
Downstream Blueback	Historical	Downstream Atlantic Sturgeon	None Documented
Downstream American Shad	Historical	Downstream Shortnose Sturgeon	None Documented
Downstream Hickory Shad	None Documented	Downstream American Eel	None Documented
One or More DS Anadromous Species	Historical	# Diadromous Sp Dnstrm (incl eel)	0

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	Yes
Barrier Blocks a Modeled BKT Catchment (DeWeber)	Yes
Native Fish Species Richness (HUC8)	50
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	4
# 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	Yes

Stream Health

Chesapeake Bay Program Stream Health	GOOD
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	Yes
Rare fish or mussel in upstream or downstream functional network	Yes

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