Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_420** **NELSON DAM**

Bay-wide Diadromous Tier	6
Bay-wide Resident Tier	3
Bay-wide Brook Trout Tier	N/A
NID ID	VA12501
State ID	420
River Name	
Dam Height (ft)	34
Dam Type	Earth
Latitude	37.6935
Longitude	-78.8818
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Rucker Run
HUC 10	Lower Tye River
HUC 8	Middle James-Buffalo
HUC 6	James
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	2.02
% Natural Cover in Upstream Drainage Area	67.24
% Forested in Upstream Drainage Area	47.83
% Agriculture in Upstream Drainage Area	18.03
% Natural Cover in ARA of Upstream Network	83.85
% Natural Cover in ARA of Downstream Network	79.33
% Forest Cover in ARA of Upstream Network	46.97
% Forest Cover in ARA of Downstream Network	65.28
% Agricultral Cover in ARA of Upstream Network	0
% Agricultral Cover in ARA of Downstream Network	16.03
% Impervious Surf in ARA of Upstream Network	2.83
% Impervious Surf in ARA of Downstream Network	0.71

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	58.79
% Tree Cover in ARA of Downstream Network	79.1
% Herbaceaous Cover in ARA of Upstream Network	5.42
% Herbaceaous Cover in ARA of Downstream Network	15.73
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.1
% Road Impervious in ARA of Upstream Network	1
% Road Impervious in ARA of Downstream Network	0.6
% Other Impervious in ARA of Upstream Network	1.38
% Other Impervious in ARA of Downstream Network	0.78

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)	2.74	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	5433.76	# Downsteam Natural Barriers	0
Absolute Gain (mi)	2.74	# Downstream Hydropower Dams	2
# Size Classes in Total Network	6	# Downstream Dams with Passage	4
# Upstream Network Size Classes	1	# of Downstream Barriers	4

NFHAP Cumulative Disturbance Index	Moderate
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	11.93
% Conserved Land in 100m Buffer of Downstream Network	11.23
Density of Crossings in Upstream Network Watershed (#/m2)	0.9
Density of Crossings in Downstream Network Watershed (#/m2)	0.84
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	Potential Current	Downstream Striped Bass	None Documented
Downstream Blueback	Potential 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	Potential Curre
# Diadromous Species Downstream (incl eel)	1

Resident Fish

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)	No
Native Fish Species Richness (HUC8)	50
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	4
# 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	High
PA IBI Stream Health	N/A

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