

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_77**

NEALS DAM

Bay-wide Diadromous Tier	15
Bay-wide Resident Tier	13
Bay-wide Brook Trout Tier	N/A
NID ID	VA13705
State ID	77
River Name	
Dam Height (ft)	20
Dam Type	Gravity
Latitude	38.1753
Longitude	-78.1924
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Blue Run
HUC 10	Blue Run-Rapidan River
HUC 8	Rapidan-Upper Rappahannock
HUC 6	Lower Chesapeake
HUC 4	Lower Chesapeake



Landcover

NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	0.39	% Tree Cover in ARA of Upstream Network	27.57
% Natural Cover in Upstream Drainage Area	44.16	% Tree Cover in ARA of Downstream Network	59.12
% Forested in Upstream Drainage Area	41.99	% Herbaceous Cover in ARA of Upstream Network	38.44
% Agriculture in Upstream Drainage Area	49.85	% Herbaceous Cover in ARA of Downstream Network	37.94
% Natural Cover in ARA of Upstream Network	41.73	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	45.08	% Barren Cover in ARA of Downstream Network	0.35
% Forest Cover in ARA of Upstream Network	7.09	% Road Impervious in ARA of Upstream Network	0
% Forest Cover in ARA of Downstream Network	42.26	% Road Impervious in ARA of Downstream Network	0.72
% Agricultural Cover in ARA of Upstream Network	47.24	% Other Impervious in ARA of Upstream Network	0
% Agricultural Cover in ARA of Downstream Network	49.71	% Other Impervious in ARA of Downstream Network	0.61
% Impervious Surf in ARA of Upstream Network	0.92		
% Impervious Surf in ARA of Downstream Network	0.5		

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)	1.18	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	521.66	# Downstream Natural Barriers	0
Absolute Gain (mi)	1.18	# Downstream Hydropower Dams	0
# Size Classes in Total Network	4	# Downstream Dams with Passage	1
# Upstream Network Size Classes	1	# of Downstream Barriers	2
NFHAP Cumulative Disturbance Index	Very High		
Dam is on Conserved Land	Yes		
% Conserved Land in 100m Buffer of Upstream Network	100		
% Conserved Land in 100m Buffer of Downstream Network	33.18		
Density of Crossings in Upstream Network Watershed (#/m2)	3.56		
Density of Crossings in Downstream Network Watershed (#/m2)	0.88		
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	None Documented	Downstream Shortnose Sturgeon	None Documented
Downstream Hickory Shad	None Documented	Downstream American Eel	Current
Presence of 1 or More Downstream Anadromous Species	Historical		
# 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)	56
# Rare Fish (HUC8)	1
# Rare Mussel (HUC8)	3
# Rare Crayfish (HUC8)	0

Stream Health

Chesapeake Bay Program Stream Health	POOR
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	Moderate
PA IBI Stream Health	N/A

Metric descriptions can be found at:

http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-prot02/images/Metric_Glossary.pdf