

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_1134**

FRONT ROYAL DAM

Bay-wide Diadromous Tier	17
Bay-wide Resident Tier	13
Bay-wide Brook Trout Tier	N/A
NID ID	VA18705
State ID	1134
River Name	Sloan Creek
Dam Height (ft)	26
Dam Type	Gravity
Latitude	38.877
Longitude	-78.1508
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Happy Creek
HUC 10	Gooney Run-South Fork Shenan
HUC 8	South Fork Shenandoah
HUC 6	Potomac
HUC 4	Potomac



Landcover

NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	1.98	% Tree Cover in ARA of Upstream Network	49.87
% Natural Cover in Upstream Drainage Area	71.07	% Tree Cover in ARA of Downstream Network	59.79
% Forested in Upstream Drainage Area	70.69	% Herbaceous Cover in ARA of Upstream Network	18.23
% Agriculture in Upstream Drainage Area	7.31	% Herbaceous Cover in ARA of Downstream Network	28.7
% Natural Cover in ARA of Upstream Network	30.37	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	61.79	% Barren Cover in ARA of Downstream Network	0.68
% Forest Cover in ARA of Upstream Network	23.7	% Road Impervious in ARA of Upstream Network	6.28
% Forest Cover in ARA of Downstream Network	53.27	% Road Impervious in ARA of Downstream Network	1.87
% Agricultural Cover in ARA of Upstream Network	0	% Other Impervious in ARA of Upstream Network	3.32
% Agricultural Cover in ARA of Downstream Network	28.34	% Other Impervious in ARA of Downstream Network	2.27
% Impervious Surf in ARA of Upstream Network	8.84		
% Impervious Surf in ARA of Downstream Network	1.76		

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)	4.55	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	837.07	# Downstream Natural Barriers	1
Absolute Gain (mi)	4.55	# Downstream Hydropower Dams	2
# Size Classes in Total Network	5	# Downstream Dams with Passage	3
# Upstream Network Size Classes	1	# of Downstream Barriers	4
NFHAP Cumulative Disturbance Index	Not Scored / Unavailable at this scale		
Dam is on Conserved Land	No		
% Conserved Land in 100m Buffer of Upstream Network	59.85		
% Conserved Land in 100m Buffer of Downstream Network	30.89		
Density of Crossings in Upstream Network Watershed (#/m2)	2.29		
Density of Crossings in Downstream Network Watershed (#/m2)	1.29		
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	None Documented	Downstream Striped Bass	None Documented
Downstream Blueback	None Documented	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	None Documented		
# 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)	Yes
Native Fish Species Richness (HUC8)	35
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	0
# 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	Moderate
PA IBI Stream Health	N/A

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