Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_1079** **SMITHLEIGH DAM**

Bay-wide Diadromous Tier	17
Bay-wide Resident Tier	13
Bay-wide Brook Trout Tier	N/A
NID ID	VA01523
State ID	1079
River Name	Middle River
Dam Height (ft)	22
Dam Type	Gravity
Latitude	38.1527
Longitude	-79.2134
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Edison Creek-Middle River
HUC 10	Upper Middle River
HUC 8	South Fork Shenandoah
HUC 6	Potomac
HUC 4	Potomac

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.26
% Natural Cover in Upstream Drainage Area	56.41
% Forested in Upstream Drainage Area	55.8
% Agriculture in Upstream Drainage Area	39.78
% Natural Cover in ARA of Upstream Network	15.73
% Natural Cover in ARA of Downstream Network	33.17
% Forest Cover in ARA of Upstream Network	14.08
% Forest Cover in ARA of Downstream Network	32.05
% Agricultral Cover in ARA of Upstream Network	74.4
% Agricultral Cover in ARA of Downstream Network	50.49
% Impervious Surf in ARA of Upstream Network	0.84
% Impervious Surf in ARA of Downstream Network	3.12

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	26.33
% Tree Cover in ARA of Downstream Network	43.94
% Herbaceaous Cover in ARA of Upstream Network	70.28
% Herbaceaous Cover in ARA of Downstream Network	50.44
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.03
% Road Impervious in ARA of Upstream Network	1.22
% Road Impervious in ARA of Downstream Network	1.87
% Other Impervious in ARA of Upstream Network	0.82
% Other Impervious in ARA of Downstream Network	2.07

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)	58.33	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	818.91	# Downsteam Natural Barriers	2
Absolute Gain (mi)	58.33	# Downstream Hydropower Dams	4
# Size Classes in Total Network	4	# Downstream Dams with Passage	3
# Upstream Network Size Classes	2	# of Downstream Barriers	9

NFHAP Cumulative Disturbance Index	Not Scored / Unavailable at this scale
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	23.11
% Conserved Land in 100m Buffer of Downstream Network	16.12
Density of Crossings in Upstream Network Watershed (#/m2)	0.98
Density of Crossings in Downstream Network Watershed (#/m2)	1.85
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	None Documented
One or More DS Anadromous Species	None Docume	# 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	No
Barrier Blocks a Modeled BKT Catchment (DeWeber)	No
Native Fish Species Richness (HUC8)	35
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	0
# 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	Moderate
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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