Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **PA_28-001** **MERCERSBURG RESERVOIR**

Bay-wide Diadromous Tier	18
Bay-wide Resident Tier	9
Bay-wide Brook Trout Tier	4
NID ID	
State ID	28-001
River Name	Buck Run
Dam Height (ft)	22
Dam Type	Earth
Latitude	39.8763
Longitude	-77.954
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Lower West Branch Conococheа
HUC 10	West Branch Conococheague Cr
HUC 8	Conococheague-Opequon
HUC 6	Potomac
HUC 4	Potomac

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.41
% Natural Cover in Upstream Drainage Area	93.69
% Forested in Upstream Drainage Area	93.56
% Agriculture in Upstream Drainage Area	0
% Natural Cover in ARA of Upstream Network	85.13
% Natural Cover in ARA of Downstream Network	36.25
% Forest Cover in ARA of Upstream Network	84.2
% Forest Cover in ARA of Downstream Network	32.21
% Agricultral Cover in ARA of Upstream Network	0
% Agricultral Cover in ARA of Downstream Network	55.07
% Impervious Surf in ARA of Upstream Network	0.62
% Impervious Surf in ARA of Downstream Network	1.73

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	96.59
% Tree Cover in ARA of Downstream Network	39.95
% Herbaceaous Cover in ARA of Upstream Network	2.1
% Herbaceaous Cover in ARA of Downstream Network	53.82
% Barren Cover in ARA of Upstream Network	0.01
% Barren Cover in ARA of Downstream Network	0.45
% Road Impervious in ARA of Upstream Network	0.33
% Road Impervious in ARA of Downstream Network	1.07
% Other Impervious in ARA of Upstream Network	0.1
% Other Impervious in ARA of Downstream Network	2.03

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)	6.67	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	175.49	# Downsteam Natural Barriers	1
Absolute Gain (mi)	6.67	# Downstream Hydropower Dams	2
# Size Classes in Total Network	3	# Downstream Dams with Passage	1
# Upstream Network Size Classes	1	# of Downstream Barriers	8

NFHAP Cumulative Disturbance Index	Low
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	67.79
% Conserved Land in 100m Buffer of Downstream Network	5.36
Density of Crossings in Upstream Network Watershed (#/m2)	0.57
Density of Crossings in Downstream Network Watershed (#/m2)	0.79
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
One or More DS Anadromous Species	None Docume	# Diadromous Sp Dnstrm (incl eel)	1

Resident Fish and Rare Species

Barrier is in EBTJV BKT Catchment	Yes
Barrier is in Modeled BKT Catchment (DeWeber)	No
Barrier Blocks an EBTJV Catchment	No
Barrier Blocks a Modeled BKT Catchment (DeWeber)	Yes
Native Fish Species Richness (HUC8)	42
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	5
# 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	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	N/A
PA IBI Stream Health	Fair

Rare fish or mussel sp in HUC12	No
Rare fish or mussel in upstream or downstream functional network	No

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