Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_1248** **LAKE MONTCLAIR DAM**

Bay-wide Diadromous Tier	11
Bay-wide Resident Tier	3
Bay-wide Brook Trout Tier	N/A
NID ID	VA15303
State ID	1248
River Name	Powells Creek
Dam Height (ft)	74
Dam Type	Gravity
Latitude	38.6103
Longitude	-77.3429
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Powells Creek
HUC 10	Quantico Creek-Potomac River
HUC 8	Lower Potomac
HUC 6	Potomac
HUC 4	Potomac

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	8.73
% Natural Cover in Upstream Drainage Area	57.64
% Forested in Upstream Drainage Area	43.66
% Agriculture in Upstream Drainage Area	3.75
% Natural Cover in ARA of Upstream Network	77.93
% Natural Cover in ARA of Downstream Network	72.92
% Forest Cover in ARA of Upstream Network	45.32
% Forest Cover in ARA of Downstream Network	22.17
% Agricultral Cover in ARA of Upstream Network	4.15
% Agricultral Cover in ARA of Downstream Network	0.87
% Impervious Surf in ARA of Upstream Network	3.11
% Impervious Surf in ARA of Downstream Network	6.22

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	72.52
% Tree Cover in ARA of Downstream Network	52.69
% Herbaceaous Cover in ARA of Upstream Network	14
% Herbaceaous Cover in ARA of Downstream Network	11.27
% Barren Cover in ARA of Upstream Network	1.34
% Barren Cover in ARA of Downstream Network	0.25
% Road Impervious in ARA of Upstream Network	2.44
% Road Impervious in ARA of Downstream Network	2.63
% Other Impervious in ARA of Upstream Network	4.81
% Other Impervious in ARA of Downstream Network	4.15

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)	26.41	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	42.27	# Downsteam Natural Barriers	0
Absolute Gain (mi)	15.86	# Downstream Hydropower Dams	0
# Size Classes in Total Network	2	# Downstream Dams with Passage	0
# Upstream Network Size Classes	2	# of Downstream Barriers	0

NFHAP Cumulative Disturbance Index	Not Scored / Unavailable at this scale
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	3.16
% Conserved Land in 100m Buffer of Downstream Network	2.81
Density of Crossings in Upstream Network Watershed (#/m2)	1.07
Density of Crossings in Downstream Network Watershed (#/m2)	0.56
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	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)	55
# Rare Fish (HUC8)	3
# Rare Mussel (HUC8)	2
# 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	GOOD
MD MBSS Benthic IBI Stream Health	Fair
MD MBSS Fish IBI Stream Health	Fair
MD MBSS Combined IBI Stream Health	Fair
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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