Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_345** **MUDDY CREEK DAM #1**

Diadromous Tier	5
Brook Trout Tier	N/A
Resident Tier	2
NID ID	VA02911
State ID	345
River Name	Muddy Creek
Dam Height (ft)	39.2
Dam Type	Earth
Latitude	37.6582
Longitude	-78.5314
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Joshua Creek-Slate River
HUC 10	Lower Slate River
HUC 8	Middle James-Buffalo
HUC 6	James
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.19
% Natural Cover in Upstream Drainage Area	81.66
% Forested in Upstream Drainage Area	64.78
% Agriculture in Upstream Drainage Area	15.98
% Natural Cover in ARA of Upstream Network	89.59
% Natural Cover in ARA of Downstream Network	79.33
% Forest Cover in ARA of Upstream Network	63.67
% Forest Cover in ARA of Downstream Network	65.28
% Agricultral Cover in ARA of Upstream Network	10.12
% Agricultral Cover in ARA of Downstream Network	16.03
% Impervious Surf in ARA of Upstream Network	0.02
% Impervious Surf in ARA of Downstream Network	0.71

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	84.41
% Tree Cover in ARA of Downstream Network	79.1
% Herbaceaous Cover in ARA of Upstream Network	13.05
% Herbaceaous Cover in ARA of Downstream Network	15.73
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.1
% Road Impervious in ARA of Upstream Network	0.03
% Road Impervious in ARA of Downstream Network	0.6
% Other Impervious in ARA of Upstream Network	0.18
% Other Impervious in ARA of Downstream Network	0.78

Metric descriptions can be found at:
http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf

The Nature Conservancy

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_345** **MUDDY CREEK DAM #1**

Network, System Type and Condition

Functional Upstream Network (mi)	8.17	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	5439.19	# Downsteam Natural Barriers	0
Absolute Gain (mi)	8.17	# Downstream Hydropower Dams	2
# Size Classes in Total Network	6	# Downstream Dams with Passage	4
# 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	0
% Conserved Land in 100m Buffer of Downstream Network	11.23
Density of Crossings in Upstream Network Watershed (#/m2)	0.63
Density of Crossings in Downstream Network Watershed (#/m2)	0.84
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	Potential Current	Downstream Striped Bass	None Documented
Downstream Blueback	Potential Current	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	Potential Curre
# 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)	50
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	4
# 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	High
PA IBI Stream Health	N/A

Metric descriptions can be found at:
http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf

The Nature Conservancy