Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **MD_12083** **UNICORN BRANCH DAM**

Bay-wide Diadromous Tier	1
Bay-wide Resident Tier	7
Bay-wide Brook Trout Tier	N/A
NID ID	MD00047
State ID	12083
River Name	Unicorn Branch
Dam Height (ft)	13
Dam Type	Earth
Latitude	39.2476
Longitude	-75.8595
Passage Facilities	Steepass
Passage Year	1996
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Unicorn Branch
HUC 10	Chester River
HUC 8	Chester-Sassafras
HUC 6	Upper Chesapeake
HUC 4	Upper Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.54
% Natural Cover in Upstream Drainage Area	31.38
% Forested in Upstream Drainage Area	11.47
% Agriculture in Upstream Drainage Area	63.97
% Natural Cover in ARA of Upstream Network	42.88
% Natural Cover in ARA of Downstream Network	40.6
% Forest Cover in ARA of Upstream Network	15.72
% Forest Cover in ARA of Downstream Network	11.65
% Agricultral Cover in ARA of Upstream Network	52.31
% Agricultral Cover in ARA of Downstream Network	51.32
% Impervious Surf in ARA of Upstream Network	0.54
% Impervious Surf in ARA of Downstream Network	1.17

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	45.87
% Tree Cover in ARA of Downstream Network	36.77
% Herbaceaous Cover in ARA of Upstream Network	51.8
% Herbaceaous Cover in ARA of Downstream Network	54.04
% Barren Cover in ARA of Upstream Network	0.15
% Barren Cover in ARA of Downstream Network	0.15
% Road Impervious in ARA of Upstream Network	0.82
% Road Impervious in ARA of Downstream Network	1
% Other Impervious in ARA of Upstream Network	0.8
% Other Impervious in ARA of Downstream Network	1.46

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)	39.31	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	660.37	# Downsteam Natural Barriers	0
Absolute Gain (mi)	39.31	# Downstream Hydropower Dams	0
# Size Classes in Total Network	4	# 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	Yes
% Conserved Land in 100m Buffer of Upstream Network	25.9
% Conserved Land in 100m Buffer of Downstream Network	20.13
Density of Crossings in Upstream Network Watershed (#/m2)	0.5
Density of Crossings in Downstream Network Watershed (#/m2)	0.46
Density of off-channel dams in Upstream Network Watershed (#/m2)	0
Density of off-channel dams in Downstream Network Watershed (#/m2)	0.02

Diadromous Fish

Downstream Alewife	Current	Downstream Striped Bass	None Documented
Downstream Blueback	Current	Downstream Atlantic Sturgeon	None Documented
Downstream American Shad	None Documented	Downstream Shortnose Sturgeon	None Documented
Downstream Hickory Shad	Current	Downstream American Eel	Current
One or More DS Anadromous Species	Current	# Diadromous Sp Dnstrm (incl eel)	4

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)	48
# Rare Fish (HUC8)	1
# 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	Yes

Stream Health

Chesapeake Bay Program Stream Health	FAIR
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	N/A
PA IBI Stream Health	N/A

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

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