Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_759** **BROAD BRANCH DAM (RESERVOIR # 2)**

Bay-wide Diadromous Tier	12
Bay-wide Resident Tier	13
Bay-wide Brook Trout Tier	N/A
NID ID	
State ID	759
River Name	Broad Branch
Dam Height (ft)	24
Dam Type	Earth
Latitude	37.6417
Longitude	-77.7001
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1a: Headwater (0 - 3.861 sq mi)
HUC 12	Tuckahoe Creek
HUC 10	Tuckahoe Creek-James River
HUC 8	Middle James-Willis
HUC 6	James
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	3.3
% Natural Cover in Upstream Drainage Area	45.82
% Forested in Upstream Drainage Area	40.56
% Agriculture in Upstream Drainage Area	9.64
% Natural Cover in ARA of Upstream Network	53.01
% Natural Cover in ARA of Downstream Network	68.59
% Forest Cover in ARA of Upstream Network	13.11
% Forest Cover in ARA of Downstream Network	40.31
% Agricultral Cover in ARA of Upstream Network	0
% Agricultral Cover in ARA of Downstream Network	7.75
% Impervious Surf in ARA of Upstream Network	6
% Impervious Surf in ARA of Downstream Network	2.32

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	18.37
% Tree Cover in ARA of Downstream Network	51.8
% Herbaceaous Cover in ARA of Upstream Network	26.17
% Herbaceaous Cover in ARA of Downstream Network	21.72
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0
% Road Impervious in ARA of Upstream Network	0.21
% Road Impervious in ARA of Downstream Network	1.35
% Other Impervious in ARA of Upstream Network	14.76
% Other Impervious in ARA of Downstream Network	2.31

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_759** **BROAD BRANCH DAM (RESERVOIR # 2)**

Network, System Type and Condition

Functional Upstream Network (mi)	0.96	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	6.58	# Downsteam Natural Barriers	0
Absolute Gain (mi)	0.96	# Downstream Hydropower Dams	3
# Size Classes in Total Network	2	# Downstream Dams with Passage	2
# Upstream Network Size Classes	1	# of Downstream Barriers	4

NFHAP Cumulative Disturbance Index	Very High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	0
% Conserved Land in 100m Buffer of Downstream Network	0
Density of Crossings in Upstream Network Watershed (#/m2)	0
Density of Crossings in Downstream Network Watershed (#/m2)	1.36
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	Historical	Downstream Striped Bass	None Documented
Downstream Blueback	Historical	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

Presence of 1 or More Downstream Anadromous Species	Historical
# Diadromous Species Downstream (incl eel)	0

Resident Fish

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)	51
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	3
# Rare Crayfish (HUC8)	0

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	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