

## Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA\_815**

**BROWN'S ISLAND DAM (VEPCO FLASH**

**Manchester Dam**

Bay-wide Diadromous Tier	1
Bay-wide Resident Tier	12
Bay-wide Brook Trout Tier	N/A
NID ID	VA76009
State ID	815
River Name	James River
Dam Height (ft)	8
Dam Type	
Latitude	37.5337
Longitude	-77.4445
Passage Facilities	Breach
Passage Year	1989
Size Class	4: Large River (3,861 - 9,653 sq
HUC 12	Little Westham Creek-James Riv
HUC 10	Tuckahoe Creek-James River
HUC 8	Middle James-Willis
HUC 6	James
HUC 4	Lower Chesapeake



### Landcover

NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	1.2	% Tree Cover in ARA of Upstream Network	9.67
% Natural Cover in Upstream Drainage Area	78.66	% Tree Cover in ARA of Downstream Network	50.43
% Forested in Upstream Drainage Area	73.48	% Herbaceous Cover in ARA of Upstream Network	21.65
% Agriculture in Upstream Drainage Area	14.2	% Herbaceous Cover in ARA of Downstream Network	21.6
% Natural Cover in ARA of Upstream Network	35.58	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	66.86	% Barren Cover in ARA of Downstream Network	1.39
% Forest Cover in ARA of Upstream Network	1.89	% Road Impervious in ARA of Upstream Network	13.66
% Forest Cover in ARA of Downstream Network	23.65	% Road Impervious in ARA of Downstream Network	3.27
% Agricultural Cover in ARA of Upstream Network	0	% Other Impervious in ARA of Upstream Network	14.42
% Agricultural Cover in ARA of Downstream Network	11.44	% Other Impervious in ARA of Downstream Network	6.14
% Impervious Surf in ARA of Upstream Network	29.13		
% Impervious Surf in ARA of Downstream Network	7.27		

Metric descriptions can be found at:

[http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric\\_Glossary.pdf](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)	0.84	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	297.2	# Downstream Natural Barriers	0
Absolute Gain (mi)	0.84	# Downstream Hydropower Dams	0
# Size Classes in Total Network	4	# Downstream Dams with Passage	0
# Upstream Network Size Classes	1	# of Downstream Barriers	0
NFHAP Cumulative Disturbance Index	Moderate		
Dam is on Conserved Land	No		
% Conserved Land in 100m Buffer of Upstream Network	2.96		
% Conserved Land in 100m Buffer of Downstream Network	7.43		
Density of Crossings in Upstream Network Watershed (#/m2)	2.88		
Density of Crossings in Downstream Network Watershed (#/m2)	1.5		
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	Current	Downstream Striped Bass	Current
Downstream Blueback	Current	Downstream Atlantic Sturgeon	Current
Downstream American Shad	Current	Downstream Shortnose Sturgeon	Current
Downstream Hickory Shad	Current	Downstream American Eel	Current
One or More DS Anadromous Species	Current	# Diadromous Sp Dnstrm (incl eel)	8

## 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)	51
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	3
# 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	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	Very High
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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