Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_379** **BOSHER DAM**

Bay-wide Diadromous Tier	1
Bay-wide Resident Tier	1
Bay-wide Brook Trout Tier	N/A
NID ID	VA08701
State ID	379
River Name	James River
Dam Height (ft)	14
Dam Type	Gravity
Latitude	37.5597
Longitude	-77.5757
Passage Facilities	Vertical Slot
Passage Year	1999
Size Class	4: Large River (3,861 - 9,653 sq
HUC 12	East Branch Tuckahoe Creek-Ja
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	1.04
% Natural Cover in Upstream Drainage Area	79.2
% Forested in Upstream Drainage Area	74.11
% Agriculture in Upstream Drainage Area	14.29
% Natural Cover in ARA of Upstream Network	79.33
% Natural Cover in ARA of Downstream Network	72.4
% Forest Cover in ARA of Upstream Network	65.28
% Forest Cover in ARA of Downstream Network	24.84
% Agricultral Cover in ARA of Upstream Network	16.03
% Agricultral Cover in ARA of Downstream Network	2.2
% Impervious Surf in ARA of Upstream Network	0.71
% Impervious Surf in ARA of Downstream Network	4.01

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	79.1
% Tree Cover in ARA of Downstream Network	52.75
% Herbaceaous Cover in ARA of Upstream Network	15.73
% Herbaceaous Cover in ARA of Downstream Network	10.83
% Barren Cover in ARA of Upstream Network	0.1
% Barren Cover in ARA of Downstream Network	0.04
% Road Impervious in ARA of Upstream Network	0.6
% Road Impervious in ARA of Downstream Network	4.07
% Other Impervious in ARA of Upstream Network	0.78
% Other Impervious in ARA of Downstream Network	4.59

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)	5431.02	Upstream Size Class Gain (#)	4
Total Functional Network (mi)	5443.69	# Downsteam Natural Barriers	0
Absolute Gain (mi)	12.67	# Downstream Hydropower Dams	2
# Size Classes in Total Network	6	# Downstream Dams with Passage	3
# Upstream Network Size Classes	6	# of Downstream Barriers	3

NFHAP Cumulative Disturbance Index	High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	11.23
% Conserved Land in 100m Buffer of Downstream Network	0.61
Density of Crossings in Upstream Network Watershed (#/m2)	0.84
Density of Crossings in Downstream Network Watershed (#/m2)	2.41
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	Current
Downstream Blueback	Current	Downstream Atlantic Sturgeon	None Documented
Downstream American Shad	Current	Downstream Shortnose Sturgeon	None Documented
Downstream Hickory Shad	None Documented	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	Yes
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	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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