Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: VA 1489698 Johnson Dam

1 Bay-wide Diadromous Tier Bay-wide Resident Tier

Bay-wide Brook Trout Tier N/A

NID ID

State ID 1489698 River Name Thumb Run

Dam Height (ft)

Dam Type

Latitude 38.7168 Longitude -77.9944

Passage Facilities None Documented

Passage Year N/A

Size Class 1b: Creek (3.861 - 38.61 sq mi)

Thumb Run HUC 12

HUC 10 Thumb Run-Rappahannock River

HUC 8 Rapidan-Upper Rappahannock

HUC₆ Lower Chesapeake HUC 4 Lower Chesapeake







Landcover			
NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	0.17	% Tree Cover in ARA of Upstream Network	60.89
% Natural Cover in Upstream Drainage Area	50	% Tree Cover in ARA of Downstream Network	62.07
% Forested in Upstream Drainage Area	49.49	% Herbaceaous Cover in ARA of Upstream Network	37.37
% Agriculture in Upstream Drainage Area	45.23	% Herbaceaous Cover in ARA of Downstream Network	28.22
% Natural Cover in ARA of Upstream Network	43.57	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	61.15	% Barren Cover in ARA of Downstream Network	0.27
% Forest Cover in ARA of Upstream Network	42.77	% Road Impervious in ARA of Upstream Network	0.51
% Forest Cover in ARA of Downstream Network	38.92	% Road Impervious in ARA of Downstream Network	0.91
% Agricultral Cover in ARA of Upstream Network	52.5	% Other Impervious in ARA of Upstream Network	0.42
% Agricultral Cover in ARA of Downstream Network	32.21	% Other Impervious in ARA of Downstream Network	1.01
% Impervious Surf in ARA of Upstream Network	0.14		
% Impervious Surf in ARA of Downstream Network	1.05		



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CFPPP Unique ID: VA 1489698 Johnson Dam Network, System Type and Condition Functional Upstream Network (mi) 71.31 Upstream Size Class Gain (#) O Total Functional Network (mi) 3400.33 # Downsteam Natural Barriers 0 Absolute Gain (mi) 71.31 \cap # Downstream Hydropower Dams # Size Classes in Total Network 5 # Downstream Dams with Passage O # Upstream Network Size Classes 2 # of Downstream Barriers Λ NEHAP Cumulative Disturbance Index High Dam is on Conserved Land Nο % Conserved Land in 100m Buffer of Upstream Network 40.95 % Conserved Land in 100m Buffer of Downstream Network 20.81 Density of Crossings in Upstream Network Watershed (#/m2) 1.11 Density of Crossings in Downstream Network Watershed (#/m2) 0.91 Density of off-channel dams in Upstream Network Watershed (#/m2) Density of off-channel dams in Downstream Network Watershed (#/m2) Λ Diadromous Fish Downstream Alewife Downstream Striped Bass None Documented Current Downstream Blueback Current Downstream Atlantic Sturgeon None Documented Downstream American Shad None Documented None Documented Downstream Shortnose Sturgeon Downstream American Eel Downstream Hickory Shad None Documented Current One or More DS Anadromous Species Current # Diadromous Sp Dnstrm (incl eel) Resident Fish and Rare Species Stream Health Barrier is in EBTJV BKT Catchment No Chesapeake Bay Program Stream Health FAIR Barrier is in Modeled BKT Catchment (DeWeber) No MD MBSS Benthic IBI Stream Health N/A Barrier Blocks an EBTJV Catchment Yes MD MBSS Fish IBI Stream Health N/A Barrier Blocks a Modeled BKT Catchment (DeWeber) No MD MBSS Combined IBI Stream Health N/A Native Fish Species Richness (HUC8) 38 VA INSTAR mIBI Stream Health High 0 # Rare Fish (HUC8) PA IBI Stream Health N/A # Rare Mussel (HUC8) 4 # Rare Crayfish (HUC8) 0 Globally rare or fed listed fish/mussel sp HUC12 Rare fish or mussel sp in HUC12 No Nο



Yes

Rare fish or mussel in upstream or

downstream functional network

Globally rare or fed listed fish/mussel sp in

upstream or downstream functional network

No