Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_1041** **FIRST BRANCH DAM**

Diadromous Tier	11
Brook Trout Tier	N/A
Resident Tier	3
NID ID	VA04146
State ID	1041
River Name	First Branch
Dam Height (ft)	40
Dam Type	Earth
Latitude	37.3414
Longitude	-77.534
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Second Branch-Licking Creek
HUC 10	Swift Creek
HUC 8	Appomattox
HUC 6	James
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	1.04
% Natural Cover in Upstream Drainage Area	84.22
% Forested in Upstream Drainage Area	78.15
% Agriculture in Upstream Drainage Area	3.69
% Natural Cover in ARA of Upstream Network	91.15
% Natural Cover in ARA of Downstream Network	84.89
% Forest Cover in ARA of Upstream Network	73.53
% Forest Cover in ARA of Downstream Network	72.76
% Agricultral Cover in ARA of Upstream Network	4.92
% Agricultral Cover in ARA of Downstream Network	8.1
% Impervious Surf in ARA of Upstream Network	0.29
% Impervious Surf in ARA of Downstream Network	0.94

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	74.87
% Tree Cover in ARA of Downstream Network	80.61
% Herbaceaous Cover in ARA of Upstream Network	9.99
% Herbaceaous Cover in ARA of Downstream Network	12.97
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.42
% Road Impervious in ARA of Upstream Network	0.81
% Road Impervious in ARA of Downstream Network	1.03
% Other Impervious in ARA of Upstream Network	3.33
% Other Impervious in ARA of Downstream Network	3.07

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)	12.91	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	109.14	# Downsteam Natural Barriers	0
Absolute Gain (mi)	12.91	# Downstream Hydropower Dams	1
# Size Classes in Total Network	3	# Downstream Dams with Passage	0
# Upstream Network Size Classes	2	# of Downstream Barriers	2

NFHAP Cumulative Disturbance Index	High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	55.61
% Conserved Land in 100m Buffer of Downstream Network	4.04
Density of Crossings in Upstream Network Watershed (#/m2)	0.6
Density of Crossings in Downstream Network Watershed (#/m2)	0.77
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)	58
# Rare Fish (HUC8)	1
# 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	Very High
PA IBI Stream Health	N/A

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