Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_671** **LAKE ANNA DAM & RESERVOIR**

Bay-wide Diadromous Tier	3
Bay-wide Resident Tier	1
Bay-wide Brook Trout Tier	N/A
NID ID	VA17702
State ID	671
River Name	North Anna River
Dam Height (ft)	100
Dam Type	Gravity
Latitude	38.0131
Longitude	-77.7125
Passage Facilities	None Documented
Passage Year	N/A
Size Class	3a: Medium Tributary River (200
HUC 12	Hawkins Creek-North Anna Rive
HUC 10	Northeast Creek-North Anna Riv
HUC 8	Pamunkey
HUC 6	Lower Chesapeake
HUC 4	Lower Chesapeake

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	0.74
% Natural Cover in Upstream Drainage Area	71.54
% Forested in Upstream Drainage Area	50.88
% Agriculture in Upstream Drainage Area	21.45
% Natural Cover in ARA of Upstream Network	80.49
% Natural Cover in ARA of Downstream Network	91.65
% Forest Cover in ARA of Upstream Network	40.25
% Forest Cover in ARA of Downstream Network	51.01
% Agricultral Cover in ARA of Upstream Network	15.54
% Agricultral Cover in ARA of Downstream Network	6.93
% Impervious Surf in ARA of Upstream Network	0.58
% Impervious Surf in ARA of Downstream Network	0.12

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	59.32
% Tree Cover in ARA of Downstream Network	91.14
% Herbaceaous Cover in ARA of Upstream Network	16.22
% Herbaceaous Cover in ARA of Downstream Network	7.42
% Barren Cover in ARA of Upstream Network	0.04
% Barren Cover in ARA of Downstream Network	0
% Road Impervious in ARA of Upstream Network	0.41
% Road Impervious in ARA of Downstream Network	0.26
% Other Impervious in ARA of Upstream Network	0.94
% Other Impervious in ARA of Downstream Network	0.22

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)	800.18	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	973.02	# Downsteam Natural Barriers	0
Absolute Gain (mi)	172.83	# Downstream Hydropower Dams	0
# Size Classes in Total Network	4	# Downstream Dams with Passage	0
# Upstream Network Size Classes	4	# of Downstream Barriers	1

NFHAP Cumulative Disturbance Index	Very High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	5.42
% Conserved Land in 100m Buffer of Downstream Network	0
Density of Crossings in Upstream Network Watershed (#/m2)	0.56
Density of Crossings in Downstream Network Watershed (#/m2)	0.59
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	None Documented
Downstream Blueback	Potential Current	Downstream Atlantic Sturgeon	None Documented
Downstream American Shad	Potential Current	Downstream Shortnose Sturgeon	None Documented
Downstream Hickory Shad	None Documented	Downstream American Eel	Current

Presence of 1 or More Downstream Anadromous Species	Potential Curre
# Diadromous Species Downstream (incl eel)	1

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)	56
# Rare Fish (HUC8)	1
# Rare Mussel (HUC8)	3
# Rare Crayfish (HUC8)	0

Stream Health

Chesapeake Bay Program Stream Health	FAIR
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	Outstanding
PA IBI Stream Health	N/A

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