Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **PA_38-086** **SWATARA INTAKE** **LEBANON WATER AUTH. DAM**

Bay-wide Diadromous Tier	2
Bay-wide Resident Tier	7
Bay-wide Brook Trout Tier	N/A
NID ID	
State ID	38-086
River Name	Swatara Creek
Dam Height (ft)	4.5
Dam Type	Concrete
Latitude	40.416
Longitude	-76.4895
Passage Facilities	Notch
Passage Year	2006
Size Class	2: Small River (38.61 - 200 sq mi
HUC 12	Lower Swatara Creek
HUC 10	Upper Swatara Creek
HUC 8	Lower Susquehanna-Swatara
HUC 6	Lower Susquehanna
HUC 4	Susquehanna

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	1.6
% Natural Cover in Upstream Drainage Area	70.49
% Forested in Upstream Drainage Area	67.4
% Agriculture in Upstream Drainage Area	20.46
% Natural Cover in ARA of Upstream Network	63.78
% Natural Cover in ARA of Downstream Network	31.55
% Forest Cover in ARA of Upstream Network	58.37
% Forest Cover in ARA of Downstream Network	24.78
% Agricultral Cover in ARA of Upstream Network	20.8
% Agricultral Cover in ARA of Downstream Network	50.68
% Impervious Surf in ARA of Upstream Network	3
% Impervious Surf in ARA of Downstream Network	4.85

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	63.56
% Tree Cover in ARA of Downstream Network	36.03
% Herbaceaous Cover in ARA of Upstream Network	28.6
% Herbaceaous Cover in ARA of Downstream Network	53.85
% Barren Cover in ARA of Upstream Network	1.02
% Barren Cover in ARA of Downstream Network	0.54
% Road Impervious in ARA of Upstream Network	1.7
% Road Impervious in ARA of Downstream Network	1.43
% Other Impervious in ARA of Upstream Network	3.28
% Other Impervious in ARA of Downstream Network	5.87

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)	197.95	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	582.94	# Downsteam Natural Barriers	0
Absolute Gain (mi)	197.95	# Downstream Hydropower Dams	4
# Size Classes in Total Network	4	# Downstream Dams with Passage	5
# Upstream Network Size Classes	3	# of Downstream Barriers	6

NFHAP Cumulative Disturbance Index	Very High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	15.29
% Conserved Land in 100m Buffer of Downstream Network	0.19
Density of Crossings in Upstream Network Watershed (#/m2)	0.97
Density of Crossings in Downstream Network Watershed (#/m2)	1.24
Density of off-channel dams in Upstream Network Watershed (#/m2)	0.01
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	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)	2

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)	Yes
Native Fish Species Richness (HUC8)	38
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	2
# Rare Crayfish (HUC8)	0
Globally rare or fed listed fish/mussel sp HUC12	Yes
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	N/A
PA IBI Stream Health	Fair
Rare fish or mussel sp in HUC12	Yes
Rare fish or mussel in upstream or downstream functional network	Yes

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