Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **PA_PA00192** **BROWNELL RESERVOIR**

Diadromous Tier	7
Brook Trout Tier	2
Resident Tier	3
NID ID	PA00192
State ID	PA00192
River Name	Racket Brook
Dam Height (ft)	64
Dam Type	Masonry / Gravity / Earth
Latitude	41.5747
Longitude	-75.4734
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Lees Creek-Lackawanna River
HUC 10	Lackawanna River
HUC 8	Upper Susquehanna-Lackawann
HUC 6	Upper Susquehanna
HUC 4	Susquehanna

Landcover

NLCD (2011)	
% Impervious Surface in Upstream Drainage Area	2.38
% Natural Cover in Upstream Drainage Area	89.24
% Forested in Upstream Drainage Area	81.96
% Agriculture in Upstream Drainage Area	0.25
% Natural Cover in ARA of Upstream Network	99.17
% Natural Cover in ARA of Downstream Network	57.7
% Forest Cover in ARA of Upstream Network	43.54
% Forest Cover in ARA of Downstream Network	44.4
% Agricultral Cover in ARA of Upstream Network	0
% Agricultral Cover in ARA of Downstream Network	27.91
% Impervious Surf in ARA of Upstream Network	0.03
% Impervious Surf in ARA of Downstream Network	3.93

Chesapeake Conservancy (2016)	
% Tree Cover in ARA of Upstream Network	47.51
% Tree Cover in ARA of Downstream Network	54.16
% Herbaceaous Cover in ARA of Upstream Network	0.97
% Herbaceaous Cover in ARA of Downstream Network	33.75
% Barren Cover in ARA of Upstream Network	0
% Barren Cover in ARA of Downstream Network	0.51
% Road Impervious in ARA of Upstream Network	0.22
% Road Impervious in ARA of Downstream Network	2
% Other Impervious in ARA of Upstream Network	0.32
% Other Impervious in ARA of Downstream Network	3.88

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)	3.13	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	7075.68	# Downsteam Natural Barriers	0
Absolute Gain (mi)	3.13	# Downstream Hydropower Dams	4
# Size Classes in Total Network	7	# Downstream Dams with Passage	5
# Upstream Network Size Classes	1	# of Downstream Barriers	6

NFHAP Cumulative Disturbance Index	Very High
Dam is on Conserved Land	No
% Conserved Land in 100m Buffer of Upstream Network	37
% Conserved Land in 100m Buffer of Downstream Network	6.98
Density of Crossings in Upstream Network Watershed (#/m2)	0.2
Density of Crossings in Downstream Network Watershed (#/m2)	0.98
Density of off-channel dams in Upstream Network Watershed (#/m2)	0
Density of off-channel dams in Downstream Network Watershed (#/m2)	0.01

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	Current

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

Resident Fish

Barrier is in EBTJV BKT Catchment	Yes
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)	37
# Rare Fish (HUC8)	0
# Rare Mussel (HUC8)	2
# 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	N/A
PA IBI Stream Health	Fair

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