

## Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA\_337**

**WILLIS RIVER DAM #3**

Bay-wide Diadromous Tier	7
Bay-wide Resident Tier	3
Bay-wide Brook Trout Tier	N/A
NID ID	VA02903
State ID	337
River Name	Bishop Creek
Dam Height (ft)	43.8
Dam Type	Earth
Latitude	37.4265
Longitude	-78.4824
Passage Facilities	None Documented
Passage Year	N/A
Size Class	1b: Creek (3.861 - 38.61 sq mi)
HUC 12	Bishop Creek-Willis River
HUC 10	Upper Willis River
HUC 8	Middle James-Willis
HUC 6	James
HUC 4	Lower Chesapeake



### Landcover

NLCD (2011)		Chesapeake Conservancy (2016)	
% Impervious Surface in Upstream Drainage Area	0.11	% Tree Cover in ARA of Upstream Network	85.62
% Natural Cover in Upstream Drainage Area	80.91	% Tree Cover in ARA of Downstream Network	88.09
% Forested in Upstream Drainage Area	62.29	% Herbaceous Cover in ARA of Upstream Network	11.56
% Agriculture in Upstream Drainage Area	17.56	% Herbaceous Cover in ARA of Downstream Network	10.47
% Natural Cover in ARA of Upstream Network	88.75	% Barren Cover in ARA of Upstream Network	0
% Natural Cover in ARA of Downstream Network	89.75	% Barren Cover in ARA of Downstream Network	0.31
% Forest Cover in ARA of Upstream Network	65.46	% Road Impervious in ARA of Upstream Network	0.08
% Forest Cover in ARA of Downstream Network	59.92	% Road Impervious in ARA of Downstream Network	0.24
% Agricultural Cover in ARA of Upstream Network	11.2	% Other Impervious in ARA of Upstream Network	0.03
% Agricultural Cover in ARA of Downstream Network	9.36	% Other Impervious in ARA of Downstream Network	0.11
% Impervious Surf in ARA of Upstream Network	0		
% Impervious Surf in ARA of Downstream Network	0.07		

Metric descriptions can be found at:

[http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric\\_Glossary.pdf](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)	9.37	Upstream Size Class Gain (#)	0
Total Functional Network (mi)	173.9	# Downsteam Natural Barriers	0
Absolute Gain (mi)	9.37	# Downstream Hydropower Dams	2
# Size Classes in Total Network	3	# Downstream Dams with Passage	4
# Upstream Network Size Classes	2	# of Downstream Barriers	5
NFHAP Cumulative Disturbance Index		Moderate	
Dam is on Conserved Land		No	
% Conserved Land in 100m Buffer of Upstream Network		0	
% Conserved Land in 100m Buffer of Downstream Network		3.36	
Density of Crossings in Upstream Network Watershed (#/m2)		0.1	
Density of Crossings in Downstream Network Watershed (#/m2)		0.5	
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	Current
One or More DS Anadromous Species	Historical	# Diadromous Sp Dnstrm (incl eel)	1
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	No	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)	51	VA INSTAR mIBI Stream Health	Moderate
# Rare Fish (HUC8)	0	PA IBI Stream Health	N/A
# Rare Mussel (HUC8)	3		
# Rare Crayfish (HUC8)	0		
Globally rare or fed listed fish/mussel sp HUC12	No	Rare fish or mussel sp in HUC12	No
Globally rare or fed listed fish/mussel sp in upstream or downstream functional network	No	Rare fish or mussel in upstream or downstream functional network	No

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[http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-prot02/images/Metric\\_Glossary.pdf](http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-prot02/images/Metric_Glossary.pdf)