

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **PA_PA00002** **ALVIN R BUSH DAM**

| | |
|--------------------|---------------------------------|
| Diadromous Tier | 5 |
| Brook Trout Tier | N/A |
| Resident Tier | 3 |
| NID ID | PA00002 |
| State ID | PA00002 |
| River Name | Kettle Creek |
| Dam Height (ft) | 165 |
| Dam Type | Earth |
| Latitude | 41.3581 |
| Longitude | -77.9227 |
| Passage Facilities | None Documented |
| Passage Year | N/A |
| Size Class | 3a: Medium Tributary River (200 |
| HUC 12 | Lower Kettle Creek |
| HUC 10 | Kettle Creek |
| HUC 8 | Middle West Branch Susquehan |
| HUC 6 | West Branch Susquehanna |
| HUC 4 | Susquehanna |



Landcover

| NLCD (2011) | | Chesapeake Conservancy (2016) | |
|---|-------|---|-------|
| % Impervious Surface in Upstream Drainage Area | 0.05 | % Tree Cover in ARA of Upstream Network | 89.82 |
| % Natural Cover in Upstream Drainage Area | 94.72 | % Tree Cover in ARA of Downstream Network | 81.88 |
| % Forested in Upstream Drainage Area | 89.36 | % Herbaceous Cover in ARA of Upstream Network | 7.42 |
| % Agriculture in Upstream Drainage Area | 4.49 | % Herbaceous Cover in ARA of Downstream Network | 7.38 |
| % Natural Cover in ARA of Upstream Network | 93.1 | % Barren Cover in ARA of Upstream Network | 0.05 |
| % Natural Cover in ARA of Downstream Network | 93.95 | % Barren Cover in ARA of Downstream Network | 0 |
| % Forest Cover in ARA of Upstream Network | 87.55 | % Road Impervious in ARA of Upstream Network | 0.4 |
| % Forest Cover in ARA of Downstream Network | 82.59 | % Road Impervious in ARA of Downstream Network | 1.47 |
| % Agricultural Cover in ARA of Upstream Network | 5.26 | % Other Impervious in ARA of Upstream Network | 0.18 |
| % Agricultural Cover in ARA of Downstream Network | 1.68 | % Other Impervious in ARA of Downstream Network | 0.62 |
| % Impervious Surf in ARA of Upstream Network | 0.09 | | |
| % Impervious Surf in ARA of Downstream Network | 1.06 | | |

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) | 261.67 | Upstream Size Class Gain (#) | 2 |
| Total Functional Network (mi) | 267.09 | # Downstream Natural Barriers | 0 |
| Absolute Gain (mi) | 5.42 | # Downstream Hydropower Dams | 4 |
| # Size Classes in Total Network | 4 | # Downstream Dams with Passage | 6 |
| # Upstream Network Size Classes | 4 | # of Downstream Barriers | 9 |
| NFHAP Cumulative Disturbance Index | Low | | |
| Dam is on Conserved Land | Yes | | |
| % Conserved Land in 100m Buffer of Upstream Network | 85.29 | | |
| % Conserved Land in 100m Buffer of Downstream Network | 90.8 | | |
| Density of Crossings in Upstream Network Watershed (#/m2) | 0.37 | | |
| Density of Crossings in Downstream Network Watershed (#/m2) | 0.23 | | |
| 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 | None Documented | Downstream Striped Bass | None Documented |
| Downstream Blueback | None Documented | Downstream Atlantic Sturgeon | None Documented |
| Downstream American Shad | Historical | 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 | 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) | 24 |
| # Rare Fish (HUC8) | 0 |
| # Rare Mussel (HUC8) | 1 |
| # Rare Crayfish (HUC8) | 0 |

Stream Health

| | |
|--------------------------------------|----------|
| Chesapeake Bay Program Stream Health | NO_SCORE |
| 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 | Good |

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