

Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_1046**

JOHNS CREEK DAM #4

| | |
|---------------------------|---------------------------------|
| Bay-wide Diadromous Tier | 8 |
| Bay-wide Resident Tier | 1 |
| Bay-wide Brook Trout Tier | N/A |
| NID ID | VA04504 |
| State ID | 1046 |
| River Name | Dicks Creek |
| Dam Height (ft) | 95 |
| Dam Type | Earth |
| Latitude | 37.4372 |
| Longitude | -80.3769 |
| Passage Facilities | None Documented |
| Passage Year | N/A |
| Size Class | 1a: Headwater (0 - 3.861 sq mi) |
| HUC 12 | Upper Johns Creek |
| HUC 10 | Johns Creek |
| HUC 8 | Upper James |
| HUC 6 | James |
| HUC 4 | Lower Chesapeake |



Landcover

| NLCD (2011) | | Chesapeake Conservancy (2016) | |
|---|-------|---|-------|
| % Impervious Surface in Upstream Drainage Area | 0.09 | % Tree Cover in ARA of Upstream Network | 88.94 |
| % Natural Cover in Upstream Drainage Area | 97.24 | % Tree Cover in ARA of Downstream Network | 79.82 |
| % Forested in Upstream Drainage Area | 96.68 | % Herbaceous Cover in ARA of Upstream Network | 8.09 |
| % Agriculture in Upstream Drainage Area | 1.5 | % Herbaceous Cover in ARA of Downstream Network | 16.17 |
| % Natural Cover in ARA of Upstream Network | 89.82 | % Barren Cover in ARA of Upstream Network | 0 |
| % Natural Cover in ARA of Downstream Network | 76.44 | % Barren Cover in ARA of Downstream Network | 0.07 |
| % Forest Cover in ARA of Upstream Network | 87.87 | % Road Impervious in ARA of Upstream Network | 1.11 |
| % Forest Cover in ARA of Downstream Network | 73.79 | % Road Impervious in ARA of Downstream Network | 1.21 |
| % Agricultural Cover in ARA of Upstream Network | 5.41 | % Other Impervious in ARA of Upstream Network | 0.63 |
| % Agricultural Cover in ARA of Downstream Network | 14.36 | % Other Impervious in ARA of Downstream Network | 1.07 |
| % Impervious Surf in ARA of Upstream Network | 0.36 | | |
| % Impervious Surf in ARA of Downstream Network | 1.46 | | |

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) | 13.07 | Upstream Size Class Gain (#) | 0 |
| Total Functional Network (mi) | 4255.83 | # Downstream Natural Barriers | 0 |
| Absolute Gain (mi) | 13.07 | # Downstream Hydropower Dams | 8 |
| # Size Classes in Total Network | 5 | # Downstream Dams with Passage | 4 |
| # Upstream Network Size Classes | 1 | # of Downstream Barriers | 11 |
| NFHAP Cumulative Disturbance Index | Moderate | | |
| Dam is on Conserved Land | No | | |
| % Conserved Land in 100m Buffer of Upstream Network | 66.37 | | |
| % Conserved Land in 100m Buffer of Downstream Network | 44.34 | | |
| Density of Crossings in Upstream Network Watershed (#/m2) | 1.08 | | |
| Density of Crossings in Downstream Network Watershed (#/m2) | 1.42 | | |
| 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 | None Documented |
| One or More DS Anadromous Species | Historical | # Diadromous Sp Dnstrm (incl eel) | 0 |

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 | Yes |
| Barrier Blocks a Modeled BKT Catchment (DeWeber) | No |
| Native Fish Species Richness (HUC8) | 47 |
| # Rare Fish (HUC8) | 2 |
| # Rare Mussel (HUC8) | 6 |
| # 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 | GOOD |
| 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 |

| | |
|--|-----|
| Rare fish or mussel sp in HUC12 | Yes |
| Rare fish or mussel in upstream or downstream functional network | Yes |

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