# Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_671** **LAKE ANNA DAM & RESERVOIR**

| | |
|---|---|
| Bay-wide Diadromous Tier | 3 |
| Bay-wide Resident Tier | 1 |
| Bay-wide Brook Trout Tier | N/A |
| NID ID | VA17702 |
| State ID | 671 |
| River Name | North Anna River |
| Dam Height (ft) | 100 |
| Dam Type | Gravity |
| Latitude | 38.0131 |
| Longitude | -77.7125 |
| Passage Facilities | None Documented |
| Passage Year | N/A |
| Size Class | 3a: Medium Tributary River (200 |
| HUC 12 | Hawkins Creek-North Anna Rive |
| HUC 10 | Northeast Creek-North Anna Riv |
| HUC 8 | Pamunkey |
| HUC 6 | Lower Chesapeake |
| HUC 4 | Lower Chesapeake |


## Landcover

| NLCD (2011) | |
|---|---|
| % Impervious Surface in Upstream Drainage Area | 0.74 |
| % Natural Cover in Upstream Drainage Area | 71.54 |
| % Forested in Upstream Drainage Area | 50.88 |
| % Agriculture in Upstream Drainage Area | 21.45 |
| % Natural Cover in ARA of Upstream Network | 80.49 |
| % Natural Cover in ARA of Downstream Network | 91.65 |
| % Forest Cover in ARA of Upstream Network | 40.25 |
| % Forest Cover in ARA of Downstream Network | 51.01 |
| % Agricultral Cover in ARA of Upstream Network | 15.54 |
| % Agricultral Cover in ARA of Downstream Network | 6.93 |
| % Impervious Surf in ARA of Upstream Network | 0.58 |
| % Impervious Surf in ARA of Downstream Network | 0.12 |

| Chesapeake Conservancy (2016) | |
|---|---|
| % Tree Cover in ARA of Upstream Network | 59.32 |
| % Tree Cover in ARA of Downstream Network | 91.14 |
| % Herbaceaous Cover in ARA of Upstream Network | 16.22 |
| % Herbaceaous Cover in ARA of Downstream Network | 7.42 |
| % Barren Cover in ARA of Upstream Network | 0.04 |
| % Barren Cover in ARA of Downstream Network | 0 |
| % Road Impervious in ARA of Upstream Network | 0.41 |
| % Road Impervious in ARA of Downstream Network | 0.26 |
| % Other Impervious in ARA of Upstream Network | 0.94 |
| % Other Impervious in ARA of Downstream Network | 0.22 |

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) | 800.18 | Upstream Size Class Gain (#) | 0 |
| Total Functional Network (mi) | 973.02 | # Downsteam Natural Barriers | 0 |
| Absolute Gain (mi) | 172.83 | # Downstream Hydropower Dams | 0 |
| # Size Classes in Total Network | 4 | # Downstream Dams with Passage | 0 |
| # Upstream Network Size Classes | 4 | # of Downstream Barriers | 1 |

| | |
|---|---|
| NFHAP Cumulative Disturbance Index | Very High |
| Dam is on Conserved Land | No |
| % Conserved Land in 100m Buffer of Upstream Network | 5.42 |
| % Conserved Land in 100m Buffer of Downstream Network | 0 |
| Density of Crossings in Upstream Network Watershed (#/m2) | 0.56 |
| Density of Crossings in Downstream Network Watershed (#/m2) | 0.59 |
| 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 | Potential Current | Downstream Striped Bass | None Documented |
| Downstream Blueback | Potential Current | Downstream Atlantic Sturgeon | None Documented |
| Downstream American Shad | Potential Current | Downstream Shortnose Sturgeon | None Documented |
| Downstream Hickory Shad | None Documented | Downstream American Eel | Current |
| One or More DS Anadromous Species | Potential Curre | # Diadromous Sp Dnstrm (incl eel) | 1 |

## 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) | No |
| Native Fish Species Richness (HUC8) | 56 |
| # Rare Fish (HUC8) | 1 |
| # Rare Mussel (HUC8) | 3 |
| # Rare Crayfish (HUC8) | 0 |
| Globally rare or fed listed fish/mussel sp HUC12 | No |
| Globally rare or fed listed fish/mussel sp in upstream or downstream functional network | No |

## 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 | Outstanding |
| PA IBI Stream Health | N/A |

| | |
|---|---|
| Rare fish or mussel sp in HUC12 | No |
| Rare fish or mussel in upstream or downstream functional network | No |

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