# Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **MD_PA026** **Liberty Lake**

| | |
|---|---|
| Bay-wide Diadromous Tier | 2 |
| Bay-wide Resident Tier | 4 |
| Bay-wide Brook Trout Tier | N/A |
| NID ID | |
| State ID | PA026 |
| River Name | North Branch Patapsco River |
| Dam Height (ft) | 175 |
| Dam Type | Unspecified Type |
| Latitude | 39.3765 |
| Longitude | -76.8904 |
| Passage Facilities | None Documented |
| Passage Year | N/A |
| Size Class | 2: Small River (38.61 - 200 sq mi |
| HUC 12 | Falls Run-Liberty Lake-North Bra |
| HUC 10 | North Branch Patapsco River |
| HUC 8 | Gunpowder-Patapsco |
| HUC 6 | Upper Chesapeake |
| HUC 4 | Upper Chesapeake |


## Landcover

| NLCD (2011) | |
|---|---|
| % Impervious Surface in Upstream Drainage Area | 3.02 |
| % Natural Cover in Upstream Drainage Area | 41.2 |
| % Forested in Upstream Drainage Area | 34.7 |
| % Agriculture in Upstream Drainage Area | 40.91 |
| % Natural Cover in ARA of Upstream Network | 73.27 |
| % Natural Cover in ARA of Downstream Network | 77.78 |
| % Forest Cover in ARA of Upstream Network | 52.13 |
| % Forest Cover in ARA of Downstream Network | 69.95 |
| % Agricultral Cover in ARA of Upstream Network | 18.78 |
| % Agricultral Cover in ARA of Downstream Network | 11.76 |
| % Impervious Surf in ARA of Upstream Network | 1.01 |
| % Impervious Surf in ARA of Downstream Network | 1.36 |

| Chesapeake Conservancy (2016) | |
|---|---|
| % Tree Cover in ARA of Upstream Network | 61.75 |
| % Tree Cover in ARA of Downstream Network | 73.89 |
| % Herbaceaous Cover in ARA of Upstream Network | 21.66 |
| % Herbaceaous Cover in ARA of Downstream Network | 19.39 |
| % Barren Cover in ARA of Upstream Network | 0.16 |
| % Barren Cover in ARA of Downstream Network | 1.36 |
| % Road Impervious in ARA of Upstream Network | 0.61 |
| % Road Impervious in ARA of Downstream Network | 0.71 |
| % Other Impervious in ARA of Upstream Network | 1.59 |
| % Other Impervious in ARA of Downstream Network | 2.48 |

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) | 244.01 | Upstream Size Class Gain (#) | 0 |
| Total Functional Network (mi) | 309.05 | # Downsteam Natural Barriers | 0 |
| Absolute Gain (mi) | 65.04 | # Downstream Hydropower Dams | 0 |
| # Size Classes in Total Network | 4 | # Downstream Dams with Passage | 1 |
| # Upstream Network Size Classes | 3 | # of Downstream Barriers | 1 |

| | |
|---|---|
| NFHAP Cumulative Disturbance Index | Very High |
| Dam is on Conserved Land | Yes |
| % Conserved Land in 100m Buffer of Upstream Network | 22.24 |
| % Conserved Land in 100m Buffer of Downstream Network | 40.29 |
| Density of Crossings in Upstream Network Watershed (#/m2) | 0.79 |
| Density of Crossings in Downstream Network Watershed (#/m2) | 1.23 |
| 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 | Current | Downstream Striped Bass | None Documented |
| Downstream Blueback | Current | 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 | Current |
| # Diadromous Species Downstream (incl eel) | 3 |

## Resident Fish

| | |
|---|---|
| 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) | 52 |
| # Rare Fish (HUC8) | 1 |
| # Rare Mussel (HUC8) | 0 |
| # Rare Crayfish (HUC8) | 0 |

## Stream Health

| | |
|---|---|
| Chesapeake Bay Program Stream Health | VERY_POOR |
| MD MBSS Benthic IBI Stream Health | Fair |
| MD MBSS Fish IBI Stream Health | Fair |
| MD MBSS Combined IBI Stream Health | Fair |
| VA INSTAR mIBI Stream Health | N/A |
| PA IBI Stream Health | N/A |

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