# Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_24** **ESSEX MILL DAM**

| | |
|---|---|
| Diadromous Tier | 2 |
| Brook Trout Tier | N/A |
| Resident Tier | 2 |
| NID ID | VA05707 |
| State ID | 24 |
| River Name | Mill Creek |
| Dam Height (ft) | 14 |
| Dam Type | Gravity |
| Latitude | 37.8606 |
| Longitude | -76.8469 |
| Passage Facilities | None Documented |
| Passage Year | N/A |
| Size Class | 1b: Creek (3.861 - 38.61 sq mi) |
| HUC 12 | Piscataway Creek |
| HUC 10 | Cat Point Creek-Rappahannock |
| HUC 8 | Lower Rappahannock |
| HUC 6 | Lower Chesapeake |
| HUC 4 | Lower Chesapeake |


## Landcover

| NLCD (2011) | |
|---|---|
| % Impervious Surface in Upstream Drainage Area | 0.53 |
| % Natural Cover in Upstream Drainage Area | 76.64 |
| % Forested in Upstream Drainage Area | 57.11 |
| % Agriculture in Upstream Drainage Area | 18.54 |
| % Natural Cover in ARA of Upstream Network | 95.63 |
| % Natural Cover in ARA of Downstream Network | 84.87 |
| % Forest Cover in ARA of Upstream Network | 60.37 |
| % Forest Cover in ARA of Downstream Network | 37.92 |
| % Agricultral Cover in ARA of Upstream Network | 2.18 |
| % Agricultral Cover in ARA of Downstream Network | 11.74 |
| % Impervious Surf in ARA of Upstream Network | 0.19 |
| % Impervious Surf in ARA of Downstream Network | 0.31 |

| Chesapeake Conservancy (2016) | |
|---|---|
| % Tree Cover in ARA of Upstream Network | 89.53 |
| % Tree Cover in ARA of Downstream Network | 75.45 |
| % Herbaceaous Cover in ARA of Upstream Network | 4.9 |
| % Herbaceaous Cover in ARA of Downstream Network | 15.78 |
| % Barren Cover in ARA of Upstream Network | 0 |
| % Barren Cover in ARA of Downstream Network | 0.01 |
| % Road Impervious in ARA of Upstream Network | 0.44 |
| % Road Impervious in ARA of Downstream Network | 0.55 |
| % Other Impervious in ARA of Upstream Network | 0.52 |
| % Other Impervious in ARA of Downstream Network | 0.72 |

Metric descriptions can be found at:
http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf

The Nature Conservancy

# Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA_24** **ESSEX MILL DAM**

## Network, System Type and Condition

| | | | |
|---|---|---|---|
| Functional Upstream Network (mi) | 22.23 | Upstream Size Class Gain (#) | 0 |
| Total Functional Network (mi) | 144.24 | # Downsteam Natural Barriers | 0 |
| Absolute Gain (mi) | 22.23 | # Downstream Hydropower Dams | 0 |
| # Size Classes in Total Network | 3 | # Downstream Dams with Passage | 0 |
| # Upstream Network Size Classes | 2 | # of Downstream Barriers | 0 |

| | |
|---|---|
| NFHAP Cumulative Disturbance Index | Not Scored / Unavailable at this scale |
| Dam is on Conserved Land | No |
| % Conserved Land in 100m Buffer of Upstream Network | 6.27 |
| % Conserved Land in 100m Buffer of Downstream Network | 2.9 |
| Density of Crossings in Upstream Network Watershed (#/m2) | 0.23 |
| Density of Crossings in Downstream Network Watershed (#/m2) | 0.29 |
| 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 | None Documented | 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 | No |
| Barrier Blocks a Modeled BKT Catchment (DeWeber) | No |
| Native Fish Species Richness (HUC8) | 58 |
| # Rare Fish (HUC8) | 2 |
| # Rare Mussel (HUC8) | 2 |
| # Rare Crayfish (HUC8) | 0 |

## Stream Health

| | |
|---|---|
| Chesapeake Bay Program Stream Health | POOR |
| 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 |

Metric descriptions can be found at:
http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf

The Nature Conservancy