Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: VA_1304a TOWN OF ORANGE DAM

Bay-wide Diadromous Tier 8
Bay-wide Resident Tier 5

Bay-wide Brook Trout Tier N/A

NID ID VA02929 State ID 1304a

River Name Rapidan River

Dam Height (ft) 38

Dam Type Gravity
Latitude 38.2658

Longitude -78.1572

Passage Facilities Denil
Passage Year 2003

Size Class 3a: Medium Tributary River (200

HUC 12 Poplar Run-Rapidan River HUC 10 Blue Run-Rapidan River

HUC 8 Rapidan-Upper Rappahannock

HUC 6 Lower Chesapeake
HUC 4 Lower Chesapeake







| Landcover | | | |
|--|-------|--|-------|
| NLCD (2011) | | Chesapeake Conservancy (2016) | |
| % Impervious Surface in Upstream Drainage Area | 0.59 | % Tree Cover in ARA of Upstream Network | 59.12 |
| % Natural Cover in Upstream Drainage Area | 60.26 | % Tree Cover in ARA of Downstream Network | 55.58 |
| % Forested in Upstream Drainage Area | 58.8 | % Herbaceaous Cover in ARA of Upstream Network | 37.94 |
| % Agriculture in Upstream Drainage Area | 34.16 | % Herbaceaous Cover in ARA of Downstream Network | 41.39 |
| % Natural Cover in ARA of Upstream Network | 45.08 | % Barren Cover in ARA of Upstream Network | 0.35 |
| % Natural Cover in ARA of Downstream Network | 41.91 | % Barren Cover in ARA of Downstream Network | 0 |
| % Forest Cover in ARA of Upstream Network | 42.26 | % Road Impervious in ARA of Upstream Network | 0.72 |
| % Forest Cover in ARA of Downstream Network | 37.83 | % Road Impervious in ARA of Downstream Network | 0.93 |
| % Agricultral Cover in ARA of Upstream Network | 49.71 | % Other Impervious in ARA of Upstream Network | 0.61 |
| % Agricultral Cover in ARA of Downstream Network | 51.17 | % Other Impervious in ARA of Downstream Network | 0.87 |
| % Impervious Surf in ARA of Upstream Network | 0.5 | | |
| % Impervious Surf in ARA of Downstream Network | 0.76 | | |



Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: VA 1304a TOWN OF ORANGE DAM Network, System Type and Condition Functional Upstream Network (mi) Upstream Size Class Gain (#) 0 520.49 Total Functional Network (mi) 1061.27 # Downsteam Natural Barriers 0 Absolute Gain (mi) 520.49 \cap # Downstream Hydropower Dams # Size Classes in Total Network 4 # Downstream Dams with Passage O # Upstream Network Size Classes # of Downstream Barriers 1 1 NEHAP Cumulative Disturbance Index High Dam is on Conserved Land Nο % Conserved Land in 100m Buffer of Upstream Network 33.18 % Conserved Land in 100m Buffer of Downstream Network 10.22 Density of Crossings in Upstream Network Watershed (#/m2) 0.88 Density of Crossings in Downstream Network Watershed (#/m2) 0.87 Density of off-channel dams in Upstream Network Watershed (#/m2) Density of off-channel dams in Downstream Network Watershed (#/m2) \cap Diadromous Fish Downstream Alewife Historical None Documented Downstream Striped Bass Downstream Blueback Historical Downstream Atlantic Sturgeon None Documented Downstream American Shad Historical None Documented Downstream Shortnose Sturgeon Downstream Hickory Shad None Documented Downstream American Eel Current One or More DS Anadromous Species Historical # Diadromous Sp Dnstrm (incl eel) Resident Fish and Rare Species Stream Health Barrier is in EBTJV BKT Catchment No Chesapeake Bay Program Stream Health POOR Barrier is in Modeled BKT Catchment (DeWeber) No MD MBSS Benthic IBI Stream Health N/A Barrier Blocks an EBTJV Catchment Nο MD MBSS Fish IBI Stream Health N/A Barrier Blocks a Modeled BKT Catchment (DeWeber) No MD MBSS Combined IBI Stream Health N/A Native Fish Species Richness (HUC8) 38 VA INSTAR mIBI Stream Health High 0 # Rare Fish (HUC8) PA IBI Stream Health N/A # Rare Mussel (HUC8) 4 # Rare Crayfish (HUC8) 0 Globally rare or fed listed fish/mussel sp HUC12 Rare fish or mussel sp in HUC12 Nο Nο Globally rare or fed listed fish/mussel sp in Rare fish or mussel in upstream or No No downstream functional network upstream or downstream functional network

