Metadata for MasterSheet\_SERC\_2015-2017\_updated\_Nov3\_21.csv

This file contains data pertaining to each field sample collected as part of the study.

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| **Column heading** | **Description** |
| HPL\_ID | Horn Point Laboratory (HPL) sample identification number |
| SERC\_ID | Smithsonian Environmental Research Center (SERC) site identification number |
| ml.Filtered | Total volume of sample filtered (mL) |
| Total.Vol..Eluted..uL. | Total volume of extracted sample eluted (µL) |
| River | River name of watershed containing site where sample was collected |
| Site | Name of SERC sampling site |
| Collector | Organization that collected sample. Includes SERC, Virginia Department of Game and Inland Fisheries (DGIF), Metropolitan Washington Council of Governments (MWCOG), District of Columbia Department of Energy and Environment (DOEE) |
| Latitude | Latitude of sampling site (decimal degrees). Not applicable (NA) used for negative field controls. |
| Longitude | Longitude of sampling site (decimal degrees). Not applicable (NA) used for negative field controls. |
| Date | Date of field sample collection |
| Temp\_C | Water temperature at field site (°C) measured by handheld YSI |
| DO\_mgl | Dissolved oxygen concentration (mg/L) at field site measured by handheld YSI |
| Salinity | Salinity (unitless) at field site interpolated by handheld YSI from temperature and conductivity |
| Cond\_mS | Conductivity (µS/cm) at field site measured by handheld YSI |
| Herring\_eggs | Number of river herring eggs in ichthyoplankton samples. NULL indicates no sample was taken. |
| Herring\_larvae | Number of river herring larvae in ichthyoplankton samples. NULL indicates no sample was taken |
| Ichthyoplankton | Total number herring eggs and larvae in ichthyoplankton samples. NULL indicates no sample was taken. |
| ADULT\_Herring | Adult river herring were observed at the site (methods at each site could include visual observation, cast net, or electrofishing) |
| ADULT\_AW | Adult Alewife were observed at the site (methods at each site could include visual observation, cast net, or electrofishing) |
| ADULT\_BB | Adult Blueback Herring were observed at the site (methods at each site could include visual observation, cast net, or electrofishing) |
| e.DNA.Sample.Obtained | TRUE indicates a field eDNA sample and NULL indicates a control sample or site where no eDNA sample was collected. |
| Inhibition | Inhibition score |
| RUN1\_Copies | Estimated number of river herring DNA copies in lab replicate 1 |
| RUN2\_Copies | Estimated number of river herring DNA copies in lab replicate 2 |
| RUN3\_Copies | Estimated number of river herring DNA copies in lab replicate 3 |
| Mean\_Copies\_raw | Mean number of river herring DNA copies per lab replicate |
| eDNA\_Copies | Mean number of river herring DNA copies per lab replicate with outliers removed |
| Copy\_Liter | Mean number of river herring DNA copies per L of water filtered |
| HerringDNA\_Present | Presence (TRUE) or lack of presence (FALSE) of river herring DNA in the sample |
| Species\_eDNA | Species of river herring detected in samples with river herring DNA present based on Sanger sequencing. Includes Alewife (AW), Blueback Herring (BB), and Hickory Shad (HS) |
| AW\_Ratio | Proportion of river herring DNA attributed to Alewife based on Sanger sequencing results |
| BB\_Ratio | Proportion of river herring DNA attributed to Blueback Herring based on Sanger sequencing |
| AW\_Copies | Number of copies of Alewife DNA per L of sample filtered |
| BB\_Copies | Number of copies of Blueback Herring DNA per L of sample filtered |
| Overall\_Presence.Absence | Presence or Absence of river herring based on ichthyoplankton, adult, and eDNA data |
| Notes..PL..Plough.Lab...  GM..Gabriella. | Sample notes made by Horn Point Lab (PL=Plough Lab) or SERC (GM=Gabriella Marafino) |
| AREA | Watershed area (m2) upstream of sample site |
| DEV11 | Proportion of watershed upstream of sample site categorized as developed land |
| CROP11 | Proportion of watershed upstream of sample site categorized as crop land |
| WETLAND11 | Proportion of watershed upstream of sample site categorized as wetlands |
| Elev | Elevation in cm |