**Metadata**

“surv\_Dat\_MS.csv” has data from mark-recapture project where fish were released in Astoria and recaptured at Bonneville Dam (2010-2015) (Wargo Rub et al., 2019). Columns: year = year released in Astoria; date= DOY released, clip = whether adipose fin was clipped (indicating hatchery origin), stock\_Prob = probability of genetic stock identification to a stock that spawns upstream of Bonneville Dam. TT\_MS= Travel time (days) to Bonneville of fish that survived, surv\_MS = detected/not detected at Bonneville Dam or upstream.

“intFile2.csv has data on population- and year- specific date of Bonneville Dam passage. This data comes originally from PTAGIS.com but is processed through a function “process\_PTAGIS\_function” in the R script “Data\_Processing.R” to add population names based on tag location (“Mark.Site.Code”). Columns: Pop = Population; MPD = Major Population Group ESU = Evolutionarily Significant Unit; DetectionYear = year detected at Bonneville Dam; detectionJulian = DOY detected at Bonneville; markYear = year tagged and released as juvenile; markJulian = year tagged; freshwater emigration year = estimate year of smolt based on length and date at tagging (see “process\_PTAGIS\_function” in the R script “Data\_Processing.R” for details).

“sea\_lion\_loess.csv.csv” contains estimates of log(sea lion counts +1) at the Astoria docks from a LOESS smoother (span = 0.02) fit to data. Estimates are from DOY 1-365 in 2010-2015. Original data came from Bryan Wright ODFW, and will be posted when their paper is published. It is currently in press in Northwest Naturalist.

“outflowWarr.csv” Discharge at Bonneville Dam 2015-1998 downloaded from Columbia River Basin Data Access in Real Time website <http://www.cbr.washington.edu/dart/query/river_graph_text>. Rows are days of year and columns are years. Units are thousand cubic feet per second.

“spill98-15War.csv” Spill at Bonneville Dam 2015-1998 downloaded from Columbia River Basin Data Access in Real Time. Rows are days of year and columns are years. Units are thousand cubic feet per second.

“tempWarr.csv” Temperature at Warrington Washington 2015-1998 downloaded from Columbia River Basin Data Access in Real Time. Rows are days of year and columns are years. Units are degrees Celsius.