



FIGURE 8: Example highlighting the effect of benthic macroinvertebrate sample taxonomic resolution on maximum observed richness values, and the resulting ability to produce ELF models - Relations with mean annual flow (MAF) for the Potomac River HUC 6 watershed (020700) shown. (a) Data containing a mix of family and genus level samples (b) Data containing a mix of family, genus, and species level samples. The dataset containing family and genus level data only has a flatter distribution with a peak value of 32, compared to the dataset containing species level data which has a peak value of 75 and a discernible flow-ecology relation that can be characterized using the ELF modeling approach.