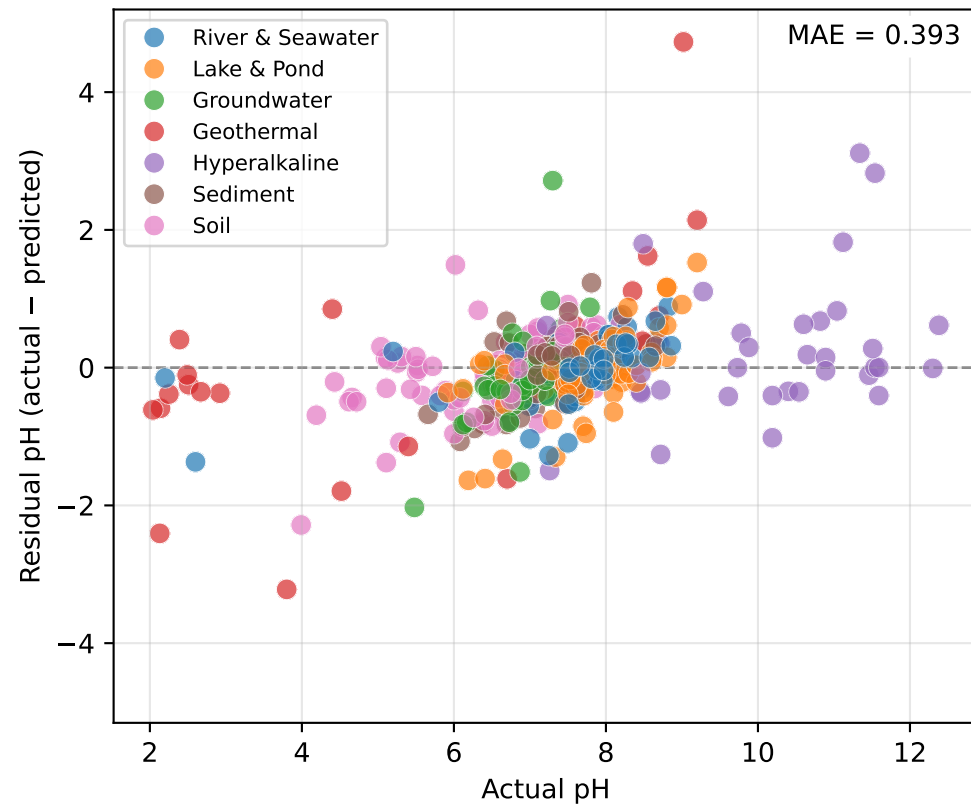Residual vs actual pH by environment