

No Effect Concentrations (NOECs), Exposure-Response Functions, and Toxic Effects Factors in the CASM_Atrazine: In Charge question #5, EPA notes that the CASM_Atrazine version they are using appears to overestimate the effects of low-level, chronic atrazine concentrations. The enclosed document details the reasons for this effect, and concludes that it results from the optional parameters selected by EPA during their research into the sensitivity of the model, specifically, 1) assigned or implied NOECs that are significantly less than actual effects observed within the micro/mesocosm studies and 2) the accumulation of small biomass deviations due to artificially high macrophyte biomass values present in the reference simulation during the early part of the year. Selection of more realistic NOECs and removing of the artificially high macrophyte biomass at the beginning of the year are options for addressing this issue.