

**REVIEWER #2**

<b>Location</b>	<b>Comment</b>	<b>Response</b>
Line 105	What means the expression: “tripartite coupling of human-water-environmental systems”? What is the “environment system” in the manuscript context? Perhaps, this new expression is not suitable and results in misunderstanding. I suggest remove it.	That 3 systems are coupled (combined). We can modify the terms and move away from systems to instead environmental factors or considerations in the revised manuscript. The research presented is a composition of parts acting together to form a whole, which is a system; however, we can present it differently to respond to this comment.
Line 111-113	The definition of risk in these lines is different from that depicted in Equation 1.	Agree and will make sure to use a consistent definition throughout and explain clearly to avoid ambiguity.
Line 116	“Hazard represents a shock that may be triggered by flooding, and which poses a negative consequence to regional health” and Figure 1 uses “toxic hazard”. Are hazards associated with floods, dam failures, or general pollutants? How do measure shock? Flood hazards should be related to the flood characteristics, for instance, return period, water level, velocity, ...	Will update terms used throughout text and figures, and ensure clarity and consistency of terms throughout the revised manuscript.
Line 119, 384	The definition of risk is very confusing. Risk is expressed differently in Equation 1 and Equation 7. In the current version, the term was used in different senses causing misunderstandings for the reader.	We will ensure that the revised manuscript is clearer, and that the terms are appropriately defined and used throughout the manuscript taking into account common conventions and definitions for these terms.
Table 4	Is social vulnerability one of the eight social impact factors? The concept of vulnerability also is confusing. What variables are really included in social vulnerability? Is Risk analysis about vulnerability or environmental and social impacts?	Will update terms as noted in the responses above.
Line 386	“food inundation boundary”, it would be “flood inundation boundary”?	Yes, will update.
General	Some citations should be re-formatted.	Used Mendeley’s built-in citation tool for NHESS; will go through and verify all formatting and update.
General	According to the NHESS guidelines, abbreviations need to be defined at the first instance in the text, for instance, SAW and ABRS.	Will update.