Response to Reviewer 2 Comments

Dear Reviewer,

Thank you for your comments concerning our manuscript (water-2370596) entitled "A New Graph-Based Deep Learning Model to Predict Flooding with Validation on a Case Study on the Humber River". On behalf of my co-authors, we thank you for giving us a chance to revise and improve the quality of our article. We have read your comment carefully and have made revisions which can be tracked using "Track Changes" in Ms/Word. We have tried our best to revise our manuscript according to the comment. The response to the reviewer's comment is listed below this letter.

Point 1: "Conclusion might be improved by suggesting what can be done to improve the model and suggestions for future work."

Response 1: Thank you for your valuable suggestion. Future works for the proposed model would comprise:

- The performance assessment of GNN-SAGE when applied to a larger river body, and the influence of different numbers of stations on the forecasted result.
- The developed model can also be applied to an early alarm flooding system.

We added possible future work applications of the proposed GNN-SAGE model (lines 678-683).