General comments:

This manuscript describes development and evaluation of a combined index for a biological early warning system using *Daphnia magna*. The manuscripts represent a good contribution to scientific progress within the scope of Drinking Water Engineering and Science. The scientific approach and applied methods are valid and the results are discussed in an appropriate way. To improve the balance in the discussion, disadvantages and weaknesses of the system and new indexes should be also included in the manuscript. The results and conclusions presented are concise, and presented in well-structured way. However, the conclusion regarding applicability of the system and indexes in the field should be further clarified.

Specific comments:

The composition of the BWES used in this study was adjusted from Jeon et al. (2008). Please comment how the reduction of the number of chambers from six to two affected the value of the TI index? Furthermore, this research used 10 daphnia per test chamber whereas in the paper by Jeon et al. (2008) each test chamber contained one *Daphnia magna,* and in the preliminary test 30 daphnia were followed. Please comment on this.

The performance of CI was evaluated by exposure tests using synthetic water and effluent. Please specify for the "effluents" whether the municipal waste water is treated, and if so, what type of treatment is applied. It would be helpful providing information about general water quality parameters from the effluents.

Please describe the preliminary 24-h whole effluent toxicity test, or at least provide the reference.

Yeosu is salt water. Please provide the value of saline concentration. How was the effect of saline concentration included in the values of various indexes?

Please discuss the results of the individual indexes for the effluents, and if not relevant, please explain why they are not discussed.

The correlation test is actually prepared only for the Yesan effluent. How many replicas were carried out for each dilution?

Fluctuating data from the effluent exposure test indicate that system is insufficiently powerful to detect toxicity level without replication. If the number of replications is the only limiting factor of the system to detect precise toxicity level, please provide information what is the minimal number of replica that will provide precise toxicity level. If number of replicas is not the only limiting factor, please address other limiting factors of the system to detect precise toxicity level.

The first conclusion is that DI shows the best performance among three indexes is demonstrated only for the copper solution, but not for the effluents. Please consider reformulating the conclusion.

In the third conclusion you suggest that further research is needed for the application in the field. Does it imply that the system is not applicable for the field study at this point? It would improve the quality of the paper if you can include what exactly can be further optimised for enhancement op accuracy and applicability of BEWS in the field. Consider reformulating the third conclusion.