The abstract has a good balance, with an introduction, aims, methods, results and discussion/conclusion. The results section in the abstract is perhaps too long. It is confusing as to why a present tense is used in the abstract. I would prefer a past tense to describe results.

'Earth' should be spelt with a capital.

The manuscript mixes the use of a serial comma with non-use. A consistent usage or non-usage must be implemented. For example, at line 1 page 3.

Line 9 page 3 : 'Richard's'

Inconsistent citation formats at:

page 2 line 32

page 3 line 26

page 3 line 32

page 4 line 19

page 4 line 23

The use of a present tense here is also unusual and I don't feel comfortable with it as a reader.

Serial commas at:

Page 7 line 29

Page 8 line 6

Page 8 line 22

Page 9 line 4

Inconsistent citation format and serial comma at page 8 line 13

n-type dash to indicate a range: page 8 line 15

'Equifinality' is mentioned on page 11 line 15 but there is no attempt to explain what the term means or even provide a citation

Forests, water bodies etc. are referred to as land use, but are these not more representative of land cover?

Page 7 line 2-3: how is surface runoff different from overland flow?

Figure 4B: for the overland water quality module, are only two broad land use types considered, namely urban and rural areas? I would surely make sense to consider a greater range of land use types?

The WQM does not mention algal growth. Does the model simulate this and the effect on nutrients?

Not enough information is provided on the WQM in terms of simulating water quality in reservoirs: stratification? Water quality sink?

Page 10 line 11 'spatial consistent'. Please reformulate this sentence into readable English.

Page 15. In terms of ranges and using hyphens, use the n-type dash.

Page 15 line 3 and 4: incorrect use of brackets. Reformulate the sentence.

Page 15 line 30 to 32: use a thousands separator (,) as you have in other parts of the document.

Page 11 line 24: You mention the 'NS' to evaluate model performance. Please state what this is. I assume it is the Nash Sutcliffe efficiency? Please provide the citation.

Page 16 line 25: Using the log (NS) is less sensitive to extreme values.

I think the manuscript would benefit from some discussion on the strategy of more complex models (as taken here) as opposed to simpler models that attempt to simulate the most important processes explaining the majority of water quality variation (requisite simplicity), and the corresponding benefits/disadvantages of each broad type of model in regards to the required observed data, ease of use, and equifinality. Perhaps the model described here needs to be places in a more global context: could it be used in other countries? Would it be of benefit in developing countries where data and resources are a limitation?