

Interactive comment on “Flow Intake Control using Dry-weather Forecast” by Otto Icke et al.

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First of all, thanks for your useful questions and remarks! We appreciate your comments! Answers to the questions and remarks of Anonymous Referee #1:

1. The Introduction explains properly the peak discharge issues after heavy rainfall events. However, I miss a clear exposition of what the authors are proposing to do in the paper.

The introduction will be expanded with a brief preview of what the reader can expect in this paper. In this way, the reader will be better guided.

2. In Section 2 the authors introduce Aquasuite[®]. This is well referenced but it would be of interest for the reader if the authors also provide a website where to

C1

find further information, in case it is available on-line.

The URL is mentioned in the reference where further information about Aquasuite[®] can be found: <http://aquasuite.net/>

3. In page 3, line 70, the authors claim: “This particular technique is based on the fully adaptive forecasting model for short-term drinking water demand (Bakker et al. 2013a) applied on waste water discharge.” This point should be clarified about if the method used is general enough or how it is adapted in this case to also cover the analysis of both drinking and wastewater. The subsequent 2 sentences don't clarify this point. Please, explain.

This technique is so generic that it can be applied on waste water discharge with some small adjustments of the settings. This method has been successfully applied for several WWTPs. Not only for predictive control on quantity but also on quality. This particular paragraph will be modified.

4. At line 81, the authors should reword the paragraph to mean that the 3 phases explanation properly corresponds to the initial statement of “a volume optimisation technique...” which seems quite generic.

We will reword this paragraph in combination with the following paragraph so that the structure of the text becomes clearer.

5. At line 91, the sentence “The optimisation technique is in principle equal to the predictive control applied in drinking water supply (Bakker et al. 2013b)” is confusing and should be explained.

This sentence will be further explained. In drinking water supply this technique is applied to flatten the consumption or distribution pattern with a reservoir

C2

to obtain an as flat as possible production pattern. In this particular study, this technique is applied to waste water discharge to optimise the flow to the treatment plant using the available storage of the sewer after precipitation events.

6. Subsection 2.4 seems more a case-study introduction than a proper implementation as it is suggested by the title. However, as a case-study is short of details as well as describing the working implementation. The authors should reword this subsection and provide more and better details.

It was chosen to briefly describe the implementation of the predictive controller without too much consideration of the details of the supporting process automation layer. It was chosen to amplify the subsection implementation with the subsection phasing and monitoring.

7. At line 174: "So-called nowcasting..." The authors should explain better what is nowcasting and it is a widely used and hugely important topic.

We will modify the text here and give a better explanation of the principle of nowcasting and its possible meaning for predictive control.

8. As a side note, it is worth mentioning that the authors should reduce as much as they can the use of "past participles" in the text.

We will check and scan the grammar in the paper and the construction of the sentences.