

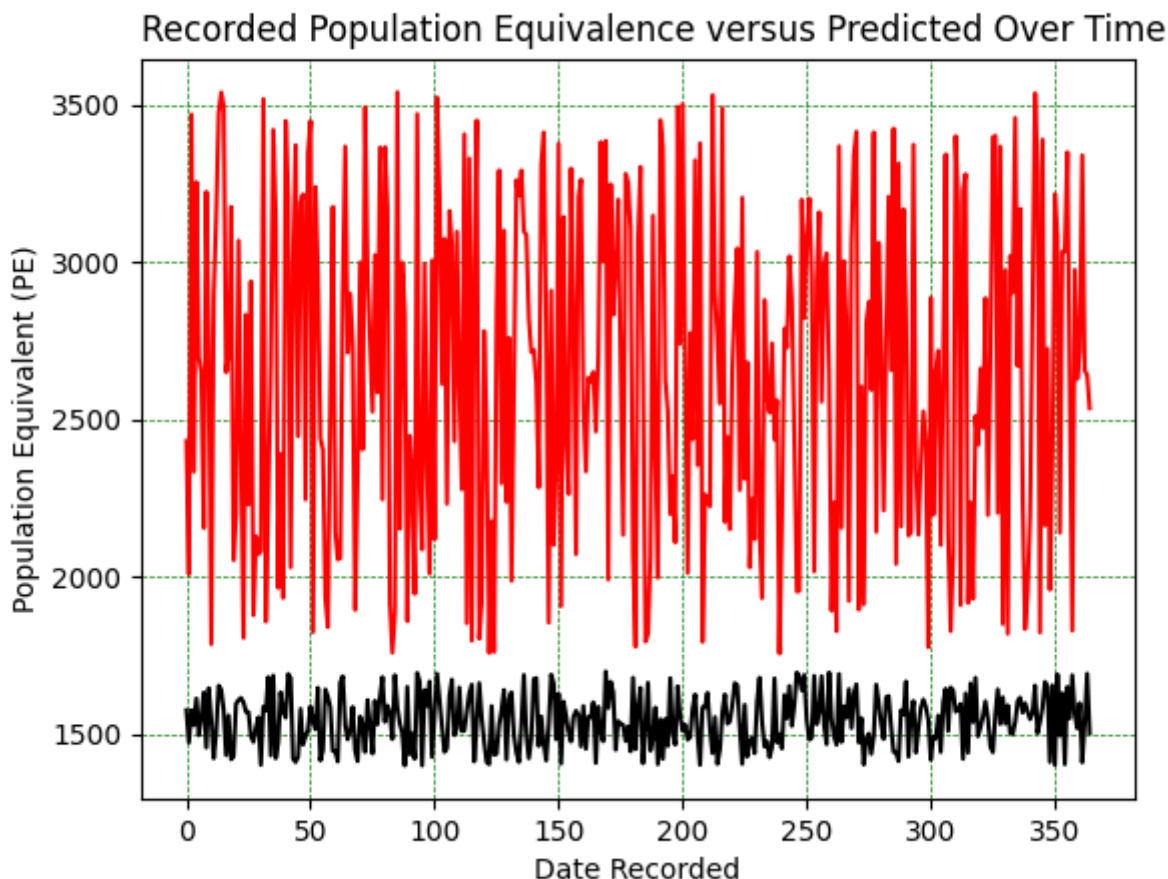
STW Analysis Report

Section 0 : Introduction

The analysis of the data input has been conducted. The analysis will provide answers on: 1. Asses the accuracy and correctness of the company given PE for individual STWs 2. Verify that the company accurately calculated and reported their proper DWF for the according STWs 3. Verify that the company accurately calculated and reported the proper FFT for the according STWs 4. Qualitatively assure companies are ensuring provision of adequate sewage treatment capacity at water companies STWs

Section 1 : Population Equivalence

The severity of the difference between the reported population equivalence and the forecasted one was determined as "severe". This means there was a high difference between the reported PE and the actual forecasted one. This could insinuate the company is trying to minimise the maintenance cost for the STWs and as well may be hiding insufficient appropriate infrastructures for their respective true populations. This is a red flag, and it would be suggested to look further into the company as to whether they are being honest and they are just struggling to update their figures quick enough and accordingly or if they are lacking honesty and are trying to cut cost in an unethical manner.

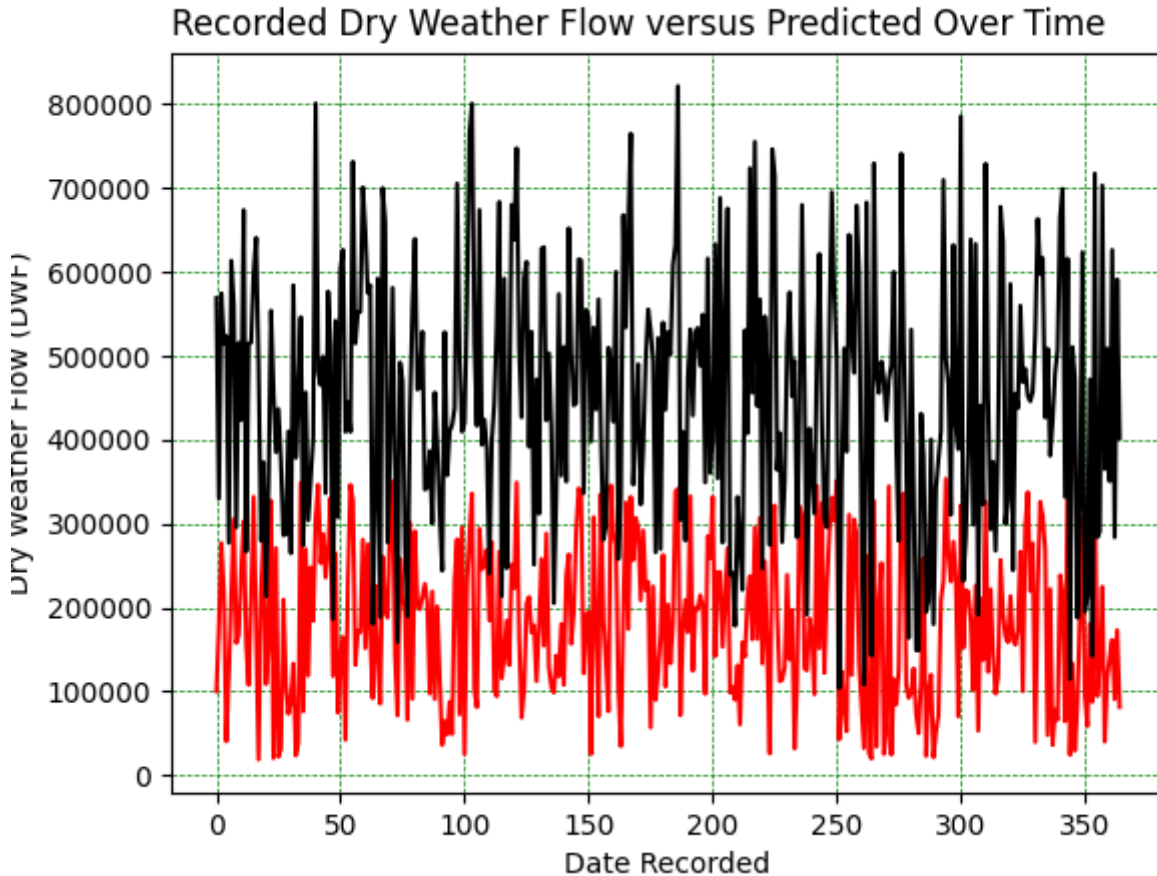


Section 2 : Dry Weather Flow

DWF value reported and the one calculated were not the same and the severity of this difference was determined as "mild". Due to a change in 2012, there is a lot more leeway about the calculations of this therefore could explain the mild difference reported. As well numbers may have been rounded up and

STW Analysis Report

therefore vary the final value slightly or it was that a company was slightly over a threshold and wish to stay under, so they do not have to increase expenses on their STWs.



Section 3 : Flow to Full Treatment

FFT value reported and the one calculated were not the same and the severity of this difference was determined as "severe". Numbers and values used in its calculations may have been rounded up and therefore vary the final value slightly. As well there are two different ways to calculate this and therefore the other equation may have been used in which values vary and it is dependent on PE which if flagged earlier may be the issue. Alternatively, this raises an important warning about the company changing values in order to avoid certain requirements that comes with higher FFT which would mean an increase in cost for STW maintenance. There is a possibility the wrong data or something was forgotten during the calculations, but this is highly unlikely. As well, the common agreement is that FFT is around 3 times DWF however many companies disagree and say it is around 2 times only and this is where a lot of the differences come from.

Section 4 : Company Analysis

The overall difference severity was "mild". Some data values were flagged, or they were all averagely flagged for being mild differences meaning that some areas of data the company sent in did not match up with what was calculated or forecasted. This may just be miscalculations and a mistake by the company or it is an issue and they are trying to stay below the threshold to cut cost however this can be mildly detrimental to the environment and river ecosystems.

STW Analysis Report

Section 5 : Conclusion

Overall to summarise the analysis of the data found:

PE: severe

DWF: mild

FFT:True

Company Analysis: mild