

## Reviewer 1

This is a very well written manuscript addressing issues found in Swan and Brown 2017, 2018. The author points out in this manuscript the main flaws found in Swan and Brown 2017 (and later the Erratum 2018): experimental design, the improper use of statistical analyses, and the discrepancies between what was written in the methods and what was actually conducted. That being said, the author provides secondary sound analysis of the data utilized in Swan and Brown 2017, and based on the new sets of results, the author deliver more accurate interpretations of the results in the context of metacommunity ecology framework and stream restoration. I believe the following comments would improve the quality and flow of this manuscript.

Title: the title would read and sound better if added “..... : comments and critiques”.

Abstract: This section is the most important part of a manuscript and yet it appears to be very short and lacking crucial information. I'm not sure what the target journal to be submitted is, but I would suggested expanding this section a little. In the end of the Abstract I was missing one of the main points stated throughout the text: the author's conclusions after re-analyzing Swan and Brown 2017 data and the ecological implications of the “Swan and Brown 2017 misleading analysis and interpretations”.

Results: It would be very helpful for the reader including a table or a figure summarizing/comparing the main findings in Swan and Brown 2017, 2018 and the findings after the re-analysis of the data.

Lines 151-153: These lines correspond to hypothesis stated by the author. But this hypothesis itself do not appear before in the text. I strongly recommend to the author clearly including/stating such hypothesis (i.e. effectiveness of local restoration) in the last paragraph of the Introduction section where the author is bringing up “why” the data found in Swan and Brown 2017 should be re-analyzed; or making clear if the author here are just re-analyzing Swan and Brown 2017 hypotheses (as I found later in the lines 242-243 “I then evaluated the same hypothesis proposed by Swan and Brown....”).

Lines 249-251: I recommend to the author excluding these lines. Indeed, Swan and Brown 2017, 2018 results were quite misleading, and what has been presented in the 2018 erratum does not quite match the code provided. The author has clearly addressed these issues throughout the manuscript text. However, stating that “Swan and Brown 2017, 2018 demonstrated questionable research practices” is quite harsh to be said in a manuscript and might sound too offensive.

Lines 240-258: Over these lines one can find the concluding remarks. However, I miss in the end of this section a more ‘concluding remark’. This section was quite repetitive on what the author has previously stated throughout the manuscript. I believe the author should include in this section a better set of ‘ecological implications and prospective suggestions’ related to issues presented in this manuscript.