The authors are very grateful for the comments of the anonymous reviewer 1 and reviewer 2 – Maurits Ertsen. The concerns of the reviewers are pertinent and their suggestions much appreciated. The authors believe that such constructive criticism certainly improved the quality of the paper. An extensive revision was made with clarification of the issues raised by the editor and referees. Particularly, we improved the methods section and included a figure summarizing the methodology, we provided a detailed examination about our option for considering a static geomorphology during modeling, and we deposited all data in a reliable public repository. We believe that this revised version is much improved and we hope that that it now satisfies the concerns of the referees and handling editor. Bellow you will find detailed responses to the reviewers comments (in blue), stating exactly the changes performed into the revised manuscript. Thank you for allowing us the opportunity to revise this manuscript and contribute to Hydrology and Earth System Sciences Journal. Please do not hesitate to contact me if you have any questions.

Reviewer 1

Main concerns:

1. The methodological section should include some clarifications about the structure of…

The authors agree that a figure with a methodology scheme would improve the understanding of the modeling procedures. Such figure was included in the manuscript. Furthermore, the methodological section was improved by adding further details to ensure reproducibility of the results. In detail, the data transference from one model to another goes like this: the CASiMiR-vegetation model provides the riparian landscape scenarios resulting from each flow regime; these landscape scenarios, discriminated by succession phases, are transformed into roughness maps that are inputted into the River2D model and will characterize the channel roughness of each scenario during the hydrodynamic modeling for the corresponding flow regime. This explanation can be found in page 6, from line 22 to 29 but was strengthened by the methodology scheme and by the added details into the methods section. Also, an additional paragraph stating strengths and limitations of the models was included in the methods section (now in P7, L5-9; P8, L22-25).

About the aquatic zone, this is a misinterpretation resulting from different aquatic zone concepts and the authors realize now that such a simple explanation as the one presented in page 6, line 38, may go unnoticed or be misunderstood by a reader unfamiliar with CASiMiR-vegetation model. By aquatic zone, the authors were not talking about the channel wetted area, which is variable throughout the year. The aquatic zone in the sense of CASiMiR-vegetation model is the permanently inundated area by the river during the hydrologic year, this is, the area flooded by the absolute minimum discharge of the river. The concept underlying the definition of this zone is that herein riparian vegetation is not capable of establishing and develop because it is always under water and riparian vegetation needs grounds that are at least in some parts of the hydrological year out of water. This is only a concept that is incorporated in the modeling of the ecological succession of riparian vegetation by CASiMiR-vegetation in order to save computational resources that would be used in modeling areas that you know will never have riparian vegetation (as long as this area is permanently inundated). When using the hydrodynamic model River2D, all the river stretch is considered and the channel roughness is set according to the succession phases of each riparian landscape scenario as well as by the river bed substrate where riparian vegetation is determined to be inexistent (this is, the aquatic zone *sensu* CASiMiR-vegetation).

The riparian vegetation landscape resulting from the CASiMiR-vegetation model will interact with river flow because the discharges in the considered flow regimes are always greater than the minimum discharge considered for the aquatic zone defined in the CASiMiR-vegetation model. Accordingly, all the area submerged by river flow in addition to this aquatic zone in the context of CASiMiR-vegetation will directly run through some succession phase of riparian vegetation. Furthermore, the interaction between river flow and riparian vegetation in the margins will influence the overall hydraulics, due to flow deflection or water retention in the margins, for instance, and thus, also the hydraulic parameters in the area without riparian vegetation will be affected. A better explanation about the definition of aquatic zone considered in the CASiMiR-vegetation model was also included in the text (now in P9, L13-16).

2. About flow regime definition (section 2.3) authors mentioned that…

The environmental flow regimes considered in this study were created in Ferreira et al. (2014) and used here. The proposal for an environmental flow regime created in Ferreira et al. (2014) considered two different flow regime components: a monthly flow regime addressing fish requirements and a multiannual flow regime composed by floods with different recurrence intervals addressing riparian vegetation requirements. The first component of this environmental flow regime, i.e., the flow regime addressing fish requirements (named Eflow in the manuscript) was determined according to the Instream Flow Incremental Methodology. The second component of this environmental flow regime (floods with a certain recurrence interval) was determined according to Rivaes et al. (2015). The environmental flow regimes used in this study were considered as an adaptation from Ferreira et al. (2014) because the authors used just the fish-addressing component as the standard procedure of an environmental flow regime considering only fish requirements (Eflow) and another environmental flow regime addressing fish and riparian requirements (named Eflow&Flush in the manuscript) composed by both components of the environmental flow regime proposed in Ferreira et al. (2014). Sentences were rewritten for a better understanding.

3. Regarding environmental flows considering riparian vegetation…

In this study, the sediment transport originated by the environmental flow regimes was not considered. The authors chose this approach based on their expert knowledge in previous studies, (namely, in Rivaes et al., 2015), where the sediment transport caused by dam flood discharges were modeled in two case studies and where results demonstrated, in both cases, that such flood discharges were not relevant for river bed degradation. Furthermore, in rivers with a bed substrate of much smaller sizes (pebbles and sand). As requested by the reviewer, a paragraph was included discussing this approach in the discussion section (now P13, L30-34).

4. Regarding vegetation modelling, CASiMiR model lacks of a crucial process such as the morphological evolution of the river…

The CASiMiR-vegetation model does not uses a fixed topography. CASiMiR-vegetation is not a hydraulic model but topography can be updated on a yearly basis during the input data upload into the dynamic module (see figure 21 of the CASiMiR-vegetation manual, page 35) of the model. Therefore, a comparison between modeling runs using fixed and variable topographies is possible using the CASiMiR-vegetation model. Nevertheless, the authors totally agree with the reviewer and are well aware of this interaction between river morphodynamics and riparian vegetation with bi-directional influences, which is particularly important in very morphodynamic rivers. Although, the references provided by the reviewer are not good examples as those only refer to gravel riverbeds, which is not the case of our study sites. In fact, as mentioned by Corenblit et al. (2011), research on the temporal scales of geomorphic and ecological processes is still scarce, even more for such coarse substrate rivers. Every case must be analyzed with a critical thinking. In this case, using a fixed topography may be considered a flaw when modeling riparian vegetation but the authors made it intentionally. By using a fixed topography, the authors were able to isolate and better analyze the effect of riparian landscape degradation on river hydraulics. Furthermore, one may not forget that the authors already tested such flow regimes in other study sites with greater morphodynamics and showed that these flow regimes will not change topography in more than a few centimeters in a decade (see Rivaes et al., 2015). Also, incorporating topography changes in the modeling runs would not allow to address the results to a solely factor. The reasons that lead the authors to consider a fixed topography during this 10 year period were: 1- the typical substrate of both study sites is armored and very coarse (boulders, large boulders and bedrock), as mentioned; 2- no significant differences were found during the substrate analysis of the different succession phases regarding the data collected in the field survey that could allow the authors to infer substrate and topographic changes according to the succession phase, and therefore authors agreed not to forecast morphological changes in observed fairly stable topographies; 3- previous studies of the authors regarding this matter show that the considered floods do not bring substantial changes to river geomorphology; 4- flow velocities and water depths experienced in the study sites for monthly discharges are not expected to induce erosion in the existing river bed; 5- the study sites are located in a fairly steep valley in which the river is not allowed to meander considerably during such a short time scale; 6- this work is on a first part focused on the modeling of riparian vegetation dynamics in a representative proportion of the existing river landscape features and although the position of these features can eventually change over time, their overall proportion is expected to remain constant (Stanford et al., 2005) and posing no noteworthy effects on the analysis of vegetation dynamics. In fact, this last reason was the basis of the modeling methodology used by Politti et al. (2014) in which they verified that only from 25 years onwards the difference in the results of riparian vegetation landscapes using a fixed topography became notable in some parts of the study site. This was possible to observe because different topographies of the study site were available. Indeed, this study was conducted for the purpose of analyzing the effects of climate change on the riparian vegetation in an Alpine river exposed to a greater morphodynamics but provides support for the decision of the authors in disregarding morphodynamics in a minor time period and for a much more stable river. Furthermore, one must not forget that in this particular case, the model calibration and validation results while using the same methodology exhibited a good agreement with the observed riparian landscape. Thus, considering the previous premises, the authors are confident that the disregard of the river morphodynamics in this case does not bring a tangible shortcoming to this research. Notwithstanding, in order to clarify the reasoning for using a fixed topography, the authors included a paragraph in the methods chapter to explain better the use of this approach and another in the discussion section debating this option in the analysis (now in P8, L1-13 and P13, L21-30).

5. About results presentation, now this section is a bit confuse and I think it will benefit from…

The authors agree that one or two sentences can be included in the results section summarizing the main results. Although the authors provide the response to the research questions in the manuscript, sentences were included to explicitly respond to those questions (now in P12, L4-6; P13, L1-6).

Specific comments:

Title: As your study encompass a decade, talk about "the long-term" is not very appropriate…

This "long-term" expression refers to the efficiency of environmental flows assessed by habitat modeling methods on the aquatic biota for which requirements it is said these flows are addressed to. The focus of this study is not on the effects of flow regulation on riparian vegetation but on the effects of environmental flows on aquatic fauna, surrogated by microhabitat metrics, in reaches for which environmental flow prescriptions are settle considering only aquatic fauna requirements. Accordingly, this research is more of a microhabitat analysis in which authors analyze the influence of the riparian landscape degradation on the hydraulic parameters water depth and flow velocity. Hence, for this spatial scale, the appropriate time scale would be, according to Frissell et al. (1986), of about 10^{-1} to at most 10 years. The authors considered a time frame of a decade in order to obtain a notable response of the riparian landscape to flow regulation without the geomorphology constrains discussed previously, which in fact revealed to be appropriate to disclose a significant trend in the riparian landscape response, but the focus is still on the effects of microhabitat amendments for fishes, which clearly change gradually every year until the end of the decade. Indubitably, considering that dams are built to last a century or more, those amendments will certainly continue to happen until a metastable state equilibrium occurs over time. In this sense, we are talking about the influence of environmental flows obtained by habitat modeling methods over the long-term perspective of the aquatic microhabitat. The authors propose to change the title to: "Importance of considering riparian vegetation requirements for the long-term efficiency of environmental flows on aquatic microhabitat".

Introduction: Introduction section provides an appropriate "stat-of-the-art" about…

Done, the authors provided clearer answers to the research questions (now in P12, L5-6 and P13, L1-6).

Methods: Study site: Page 3 line 9: Authors use a very general reference…

Information about discharge data and return periods were included in the description of the study area (now P3, L35-37). Figure 1 was changed according to the reviewer comments.

Data collection: Please, give a brief description about field procedures like…

Although sent to literature to keep the manuscript not too long, additional descriptions about field procedures were included in the methods section (now in P4, L36 until P5, L2 and P5, L25-35).

Riparian vegetation modelling Page 5 lines 36-39: "the hydrological regime is inputted…

Yes, the hydric stress imposed by the duration of extreme low flows is also accounted by CASiMiR-vegetation model. The magnitude and duration of extreme low flows are reflected in the mean annual discharge of the river, which is a model input used as a reference for the general habitat conditions that determine the expected riparian landscape according to the thresholds of riparian succession phases. This information was slightly approached in the text (page 6, lines 1-2) but an additional paragraph was included for a better explanation regarding this issue (now P7, L17-22).

Page 6 Line 8: Authors have included many supplementary material which is very appreciate…

Done according to the reviewer suggestions.

Page 6 Lines 12-13: "The resulting riparian… hereafter named natural, Eflow and Eflow&Flush…

The authors changed the word "habitats" by "landscape" (throughout the text, e.g. P1, L16). Landscape ecology is the science that studies the interactions between biotic and abiotic structures, functions, and their spatial organization (Zonneveld, 1990). The riparian landscape is therefore a term used in the scope of this science and stands for the specific spatial patterns of riparian vegetation resulting from ecological, geomorphological and hydrological processes. The elements that compose riparian landscapes can be defined as the patches with different vegetation types and succession phases, like the ones that compose our vegetation maps. Thus, riparian landscapes should not be understood here like the river corridor as a landscape, but as the riparian zone functionally dominant feature that contains and connects the elements (Malanson, 1993). Accordingly, we think this term suits well the meaning of what we want to define by riparian landscapes, which is the riparian patch mosaic that derives from a specific flow regime. The explanation of what is a riparian landscape was also included in the text (now in P3, L15-17).

Table S5: in supplementary material contains some of the vegetation model parameters…

The authors can only speculate about the reasons for this discrepancy as no in-depth research was conducted to ascertain this issue. The resistance thresholds of riparian vegetation to shear stress deeply rely on the river geomorphology and ecophysiological traits of the riparian species. Differences between Politti et al. (2014) and these case studies are found in river type, flow regime, geomorphology, hydraulics and riparian species. The Austrian case study is located in an Alpine river of much greater dimension than the considered Mediterranean case, with greater catchment area, higher and longer maximum discharges, longer flood durations and with a phenomenon known as glacial milk, which confers much more sediment load to the flowing water. Furthermore, the higher discharges in this Alpine river occur during summer, when vegetation is in its vegetative period and consequently more vulnerable to these stresses. On the other hand, Mediterranean species are well adapted to the flow regimes flashiness, characterized by very short flood durations, mostly occurring out of its vegetative period. These are all differences in the river systems that can explain the different calibration parameterization of riparian vegetation resistance thresholds in these two river systems. For instance, if you look to the Spanish case study presented by García-Arias et al. (2013), in a river stretch much more similar to our case studies, you can see a model parameterization much closer to ours.

Hydrodynamic modeling Page 6 Lines 29-31 31. "The hydraulic characteristics of each habitat…

Yes, at this stage the hydraulic parameter values were considered all together regardless from succession phases. As mentioned in the manuscript research questions (page 2 lines 30 to 38), one of the objectives of this research was to question the capacity of fish-addressed environmental flows in maintaining fish habitat availability in the long-term. The used ecohydraulic approach was successful in this task, as the considered hydraulic parameters water depth and flow velocity were significantly different between scenarios. One may not forget that we are assessing fish habitat availability in the light of fish preference for water depth and flow velocity and that we are focused on the influence of riparian landscapes in the river flow patterns. An analysis of these hydraulic parameters by succession phase is feasible but would not bring (in this case) substantial increase of information as the main succession phase interacting with river flow is Early Succession Woodland phase. This is due to the low discharges considered in the Eflow. Besides, one may not forget that the water depth and flow velocity in a certain microhabitat do not result only from the existing local conditions, but also from surrounding conditions. Furthermore, this kind of analysis would require data that the authors do not have, such as, fish preference curves for each type of vegetation indicator of each succession phase or the preference of fish species for hanging vegetation, for instance. For these reasons the authors think that analyzing the use of fish by each succession phase is quite out of the scope of the paper.

Results: In general, this section could be better structured with some sub-sections…

The authors agree and sub-sections were included in the text.

Page 7 Line 19: Here authors use "habitat" in a different context…

The authors agree and proceeded as proposed to the previous comment regarding this matter.

Page 7 Line 36: "The changes undertaken by the riparian vegetation facing different flow regimes are able…

The roughness values refer to the entire study site areas in each scenario while the values of water depth and flow velocity only refer to the areas inundated by the considered discharges as only there one can find water depth and flow velocity estimates. Once again, the authors are not analyzing the habitat suitability according with fish preference for the type of vegetation, but according to the preference of fish for water depth, flow velocity and substrate. The habitat suitability regarding these parameters can be computed independently from the type of vegetation. Although, the type of vegetation interfere in these parameters due to different characteristic roughness, which were considered during the hydrodynamic modeling.

Page 8 Lines 3-6: Comments about ks, it is not clear which comment refers to figure 4…

Figure 4 (now Figure 5) shows the distribution of the values regarding the considered hydraulic parameters for each study site. The tests presented in the supplementary material are a complement to the figure. The analysis on the differences in roughness, depth and flow velocity can be done by looking only to Figure 4 (now Figure 5). Due to the great amount of data, differences between landscapes are not very noticeable in some cases, namely in water depths and flow velocities. Nevertheless, there are statistically significant different groups that are characterized by the different letters in the figure. Consequently, the authors decided to include in the supplementary material the tests results that support the figure construction and the author statements regarding the significant differences in the hydraulic characteristics of each riparian landscape. But these test do not show the exact same information as the figure. When we stated that those differences were statistically significant, we felt obliged to present the statistical tests that support our statements. Additional clarifications were included in the text.

Figure 5: It is not indicated to which reach refer each set of graphics…

This information was added to the figure caption which was changed according comments.

Page 8 Line 34: "The Eflow habitat consistently provides less habitat suitability during autumn…

This is an error. You should read "… nase juveniles and adults…". Text was corrected (now P12, L25).

Discussion: As I mentioned before, the modelling techniques that authors used have…

Limitations of the used techniques were discussed in the discussion section. The used terms were homogenized and the paragraph rewritten. P10, L19 was also rearranged (now P15, L3-7).

Reviewer 2

Introduction

If I understand the argument correctly, the claim is that environmental flows for fish are…

When the authors refer to species with longer lifecycles they are talking in general to mention that the usual approach on environmental flows only takes into consideration the intra-annual variability of the fluvial system but there is an inter-annual variation that can influence the life cycle of many organisms and which should be considered. In this case, the authors used riparian vegetation as the example for their case study. Riparian vegetation was then introduced in the next paragraph (page 2, lines 24 and 25), where the authors explain its connection to the flow regime and to the aquatic fauna when one mentions that riparian vegetation has a clear significance in the habitat improvement of aquatic systems, with references provided. Notwithstanding, riparian vegetation was mentioned in the text as example in the considered sentence (now P2, L20).

Assuming that the paper focusses on fish and vegetation, the introduction should clarify much…

Because of the manuscript length, particularly the introduction section, the authors did not find necessary to present a deep bibliographic review about the relations between riparian vegetation and aquatic fauna. The reason for this decision is that the main scope of the manuscript is on the efficiency of environmental flows when ignoring riparian requirements and fish species were used as a surrogate for the response of aquatic communities to the expected riparian landscape changes. This response was approached from an ecohydraulic point of view, in which the river hydraulics was the considered linkage between these two communities (page 2, lines 30-33). Even so, references were presented showing the influence of riparian communities on aquatic species assemblages in order to highlight the importance of restoring riparian vegetation not only for the improvement of these communities but also for the inherent improvements that such restoration can bring to aquatic species (page 2, line 26). Nevertheless, this paragraph was improved to better clarify how riparian vegetation and fish species relate to each other (now P2, L29-39).

The research questions are not defined in a way that allows any other answer than that…

If the authors understood correctly the concern of reviewer 2, the objective of this research is not to demonstrate that habitat modeling is the only good method for environmental flow assessment. In fact, the authors never make that statement throughout the manuscript. However, this study is based on habitat analysis and the authors needed to use habitat modeling to address their research questions. The term "overlook" of the second research question means the disregard that common approaches for environmental flows definition have for other biological communities. This comes from the bibliographic review in the introduction section where it is mentioned the need for environmental flows to address the ecological requirements of different biological communities rather than only a single biological group, which usually are always fish species. The question here is not if environmental flows disregarding riparian vegetation requirements allow for the degradation of these communities. We have already noticed that from previous studies. Based on the bibliographic review, the authors did not know the answer to question 1 but they raised their hypotheses. First, the authors question if the fish habitat would stay the same throughout the years facing the degradation of riparian vegetation due to flow regulation. If changes in habitat are noticeable, second question is: what is the extent of that change due to neglecting riparian requirements. Nonetheless, the authors understand the concern of the reviewer and this sentence was changed by a more consensual one (P3, L19-21).

What is the "structural response" of riparian vegetation?

Riparian vegetation is structured or arrayed in space and time along gradients in the three river dimensions: longitudinal, lateral and vertical. A response of riparian vegetation to a certain driver implying a change in this structure is denominated a structural response of riparian vegetation. This expression is widely used in vegetation science nomenclature (e.g. NRC, 2002; Naiman et al., 2005) and the authors provided such references on the text (now in P3, L23 and 24).

Detailed remarks:

Page 1, line 33: would avoid using words like "truly".

This word was changed by “Actually” (now P1, L33).

Page 1, line 36: why "Therefore"?

The authors mean that this is a consequence of the previous sentence. However, this was changed for a better understanding (now P1, L36).

Page 2, line 6: "It is now in agreement" with only one reference is not very strong.

The authors agree. More references were added, namely, Brisbane Declaration (2007); Arthington (2012); Poff et al. (1997); Acreman et al. (2014); Acreman and Ferguson (2010) and Davis and Hirji (2003). Now in P2, L8-10.

Page 2, lines 10-11: what does "holistic"mean?

There are different methodology types for environmental flow assessment. One of those types are named “holistic methodologies” (see Arthington et al., 2003; Dyson et al., 2003; Tharme, 2003; Arthington, 2012) also known as “function analysis” (see Dyson et al., 2003). Holistic methodologies are meant to address river systems as a whole. These methodologies emerged parallel in Australia and South Africa and share one same purpose: to protect or restore the flow-related biophysical components and ecological processes of the entire river system. An explanation and references were included in the text to support the context in which this term was mentioned (now in P2, L12-15).

Page 2, line 15: why "clearly"?

The authors state “clearly” supported in the systematic synthesis of the global literature regarding environmental flows done by Gillespie et al. (2014), which realized that the majority of the studies reported to fish response and given the importance of all trophic levels in sustaining freshwater ecological integrity, the predisposition towards monitoring of this traditional indicator taxa is a concern. According to this author, also Olden et al. (2014) found this tendency and therefore verified a clear need for diversification of monitoring strategies to cover less typically monitored taxa in future studies. Notwithstanding, this word “clearly” was removed without changing the meaning of the phrase.

Page 2, line 16: do you need the word "biased"?

This comes in line with the previous question about whether environmental flow assessments are prone to fish response evaluation rather than other biological groups. This word was removed.

Page 2, line 35: "In what extent", does that exist?

The authors propose to change to “to what extent”.

Methods

It is clear how the models link to the measurements. It is not clear at all how the models have…

Additional information about models calibration was included in the text (now in P7, L24-29 and P8, L26-30). The calibration and validation of the models were referred to existing literature in order to control the length of the manuscript (see page 6, lines 3-6 and 19-20). Since the scope of the manuscript is not to present a particular model, the exhaustive description of the calibration methodology was not deemed necessary as plenty published papers already describe thoroughly the validation methodology of these models. Notwithstanding, the authors referred the calibration methodology employed in this case and presented the result of such calibration, so the reader can verify the accuracy of the model in this specific case study. Cohen’s Kappa statistic was the chosen measure to evaluate the calibration of the CASiMiR-vegetation model because this is considered a good measure to analyze this model’s accuracy and the most often used measure of inter-rater agreement for categorical classifications. Furthermore, it has an advantage over sensitivity, since it corrects the overall accuracy of model predictions by compensating for random agreement. Considering the River2D model, the authors first estimated the bed roughness coefficient, the roughness height, in accordance with the observations of bed material and bedform size for the natural flow regime. The final values of roughness height were obtained by calibrating the water surface elevation measured in different cross-sections in the field and the model results. For the different scenarios (i.e. Eflow regime and Eflow&Flush regime) the roughness height values were changed according to the expected riparian vegetation maps. For the roughness heights of the different vegetation types the authors supported their choice on expert judgment and literature. In the end, the employed models are widely used and scientifically accepted tools that were calibrated for the study sites according to recognized methodologies. Calibration results were analyzed by comparison to observed data and achieved a good classification according to different categorizations of map classification agreement. All of these provide confidence to the authors that the model results are right and simulate correctly the considered fluvial system. Furthermore, model uncertainty due to parameter estimation uncertainty can be performed by means of sensitivity analysis (Uusitalo et al., 2015). This was already assessed for both models by the authors and in both cases the models showed to be fairly robust to parameter input uncertainty (see Rivaes et al., 2013 and Boavida et al., 2013). These uncertainty analyses support the confidence of the authors that the uncertainty of models outputs are relatively small. The authors included a paragraph discussing this topic (P15, L20-24).

Results

Detailed remarks:

Done. All these remarks were addressed (see P11, L19-23, L27-28, L30-31).

Discussion

Lines 23-26 on page 9 seem to be rather important. I would suggest that these could…

Lines 23-26 were stated in a more prominent way. The two-way relation (back from fish to vegetation) is not considered in this modeling work. The two models employed in this study do not consider the effect of fish on vegetation or morphodynamics. The authors do not think this is applicable considering the river particle dimensions. River bed was considered stable during modeling runs (please see the response to reviewer 1 regarding this matter). The topics mentioned for this section by the reviewer 2 are pertinent and were discussed in the discussion section (now P13, L21-30 and P13, L34-37).

Detailed remarks:

Page 9, line 16: what does "pushed through" mean?

This means that such approach puts forward an ecological modeling procedure that is more realistic than the actual paradigm in the assessment of environmental flows by means of fish habitat modeling. This expression were changed by "enables" (now P13, L14).

Page 9, line 36: why suddenly the term "substantially"?

This means that the habitat availability originated by the Eflow changes a lot when compared to the natural and Eflow&Flush flow regimes. This expression was removed.

Other remarks:

Please check the abstract. The second sentence is very difficult to understand…

The second sentence of the abstract was modified for a better understanding.

The numbers mentioned in the abstract were introduced in a way that the authors thought to be more comprehensive and appealing to the reader without reading the entire article. Nevertheless, these specific numbers were introduced in the results section for a direct relation with the abstract values (now in P11, L36).

The language needs to be improved. For example, several times the word "inputted" is…

The manuscript was English revised by Elsevier Language Editing Services prior to the submission to HESSD journal and holds a certificate from this institution. The word "inputted" is the past tense and past participle of the verb "input". This can be found in different English dictionaries, like the Cambridge dictionary (http://dictionary.cambridge.org/dictionary/english/input) or the Oxford dictionary (https://en.oxforddictionaries.com/definition/input). If the reviewers and/or the handling editor still require a more thorough proofreading, the authors can readdress this issue to the Elsevier Language Editing Services in order to meet the expectations of the reviewers and handling editor.

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