Responses to comments and suggestions

4. Response to comments and suggestions from the fourth reviewer: EC1: <u>'Comment on hess-2022-116'</u>, Carla Ferreira, 21 Oct 2022

Q37

Section 1.1.: please, include this section in the main section.

Comments and suggestions were considered, included, and added to the introduction and other corresponding sections in the revised article.

Q38

Section 2.1: please include more information about the hydrological network, the agriculture (e.g. irrigation and main crops), water uses, describe the current condition of the riparian vegetation, etc., so that the reader has a better overview of what is being considered in the model.

- All the suggestions were included in the revised article.
- All the modified codes, input data, and the code of the modified SWAT model are available in the Zenodo repository at <u>https://doi.org/10.5281/zenodo.6301709</u> (Noa-Yarasca, 2022).
- Tables of cost of restoration were added in the supplement S7 "Cost of riparian reforestation/restoration for both scenarios: Full riparian and efficient restoration"

Q41

L129: "temperatures remain degraded" – what do you mean?

This means that stream temperature in a significant number of DMW streams remain above natural values. The mentioned statement was re-worded and better explained as follows (Line 155):

"Despite improvements in DO levels in certain streams, temperatures in a significant number of streams remain above natural values (CWL, 2019; ODA, 2018)."

Q42

L125-128: I suggest to present this information after describing the land use (end of this section)

It was modified as suggested (Line 153 in the revised manuscript)

L134: Please, correct numbering of the sub-section

It was modified as suggested (Line 165 in the revised manuscript)

L143: please, add information about the resolution of the DEM

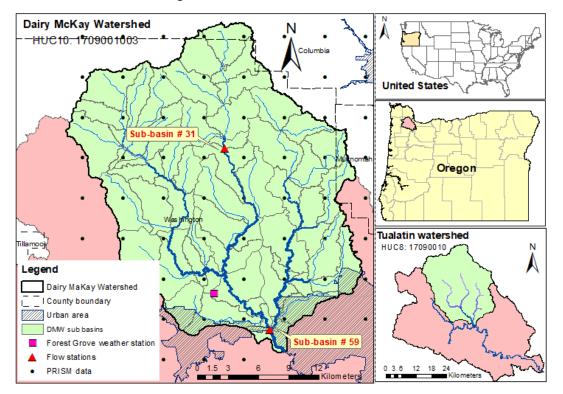
It was added as suggested (Line 178 in the revised manuscript)

L178: delete "In"

It was deleted as suggested (Line 213 in the revised manuscript)

Fig. 1: scale bar is missing

Scale bars were added in Figure 1



References.

- CWL. (2019). TUALATIN RIVER, TOTAL MAXIMUM DAILY LOAD Implementation Plan City of West Linn, Oregon City of West Linn (Issue August 2003).
- Noa-Yarasca, E. (2022). Data on An Improved Model of Shade-affected Stream Temperature in Soil & Water Assessment Tool (https://doi.org/10.5281/zenodo.6301709). zenodo.org.
- ODA. (2018). *Tualatin River Watershed Agricultural Water Quality Management Area Plan.* www.oregon.gov/ODA/programs/NaturalResources/Pages/Default.aspx