

Response to Review 2

We thank Reviewer #2 for their comments and we are grateful of the opportunity to address the concerns highlighted.

Response to general comments:

The paper mixes methods and results throughout and sometimes to the surprise of this reviewer. Things appear on the abstract and results that were never mentioned in the methods section.

See replies to Specific Comment No.2 and 9.

The paper should be in the past tense.

We will examine the text and change all verb tenses to past tense in instances where we are not generalising to other systems, or providing perspectives.

Wherever possible the paper should consider the implications for the wider journal audience and try not to sound too parochial as a report to the local agencies

Through the Discussion section we have placed the diversion of this upland channel within the context of river restoration as a whole and assess it as a principle in its own right. We also stress the potential for ineffective engineering and planning of restoration programmes to undermine their effectiveness. These general messages are already a key part of the paper. However, where appropriate we will highlight the implications of this study in a more broad sense including adding a couple of additional sentences to the introduction to widen the context.

Response to specific comments:

Comment 1. *The abstracts reads as if two different timescales of data were available and so it reads like some data were ignored. A clearer experimental design statement is needed that outlines the stream monitoring was for 2 years within longer geomorphological surveying.*

Reply 1. See reply to Specific Comment No.7.

Comment 2. *ANCOVA is mentioned in the abstract but I did not spot it elsewhere*

Reply 2. We use ANCOVA to test for significant differences in the parameters of the pre- and post-modification rating curves. These results and details of the test are reported on Page 1191.

Comment 3. *Fine sediment is not defined*

Reply 3. We will define fine sediment at its first occurrence in the manuscript (Page 1182).

Comment 4. *The term sensitive is used but why is this system more or less sensitive than any other? - How is upland defined?*

Reply 4. We don't necessarily mean that the catchment is more sensitive than any other. Rather we are merely commenting on the potential for these systems to be heavily impacted by relatively small disturbances (e.g. small landslides, point source contributions, etc.) which have the potential to increase pressure on the aquatic system due to a lack of buffering capacity which would be characteristic of a larger system. We define upland as regions

with significant areas of land above the 300 m contour, together with their associated valleys (Atherden, 1992). The majority of this catchment by area meets this definition.

Comment 5. *I would like a clear statement of the paper's aims.*

Reply 5. Page 1182 Line 25 – Page 1183 Line 4 deal with the aims of the paper. However we will modify this section to explicitly state the aims.

Comment 6. *P1186 – sentence about NIMROD seems out of place.*

Reply 6. I'm not sure which sentence you refer to. Reference to NIMROD on Page 1186 states: i) that NIMROD is used for rainfall estimates; ii) the temporal and spatial resolution of data; iii) justification of its use over other rainfall sources. This is describing our methodology so is appropriately placed in the 'Materials and Methods' section of the paper.

Comment 7. *Needs an experimental design statement that gives the dates of monitoring and makes clear the time progress of the study, i.e. from stream monitoring to surveying.*

Reply 7. We will include a statement that explicitly discloses the time frame over which the in-situ hydrological monitoring and geomorphological surveys took place. This will be incorporated within Section 3.1.

Comment 8. *Abstract mentions ANCOVA?*

Reply 8. See reply to Specific Comment No.2.

Comment 9. *It seems that each section of the results start with statement of methods, these are either repeats or are new. When they are repeats they should be deleted when new they should be removed but detailed in the methods. For example, remove the first sentence of section 4.3 as it is a repeat of methods. In section 4.3.1 there are references to methods and measures not previously actually mentioned in the methods section.*

Reply 9. We will remove any duplication and ensure that no new methods are introduced within any of the Results sections.

References

Atherden, M. 1992. Upland Britain: A Natural History. Manchester University Press, Manchester, 224p.