

Reviewer Comments:

Thanks to the editor for giving opportunity to review this article which is already peer-reviewed first round.

The article entitled: Impact of LUCC on Streamflow Based on the SWAT Model over the Wei River Basin on the Loess Plateau of China by Hong Wang and Fubao Sun. This article is narrated very well and easy to understand. Since it is already reviewed earlier the quality of the paper improved a lot compared to initial submission. Paper is worth of publishing in HESS with minor revision as follows:

1. Sufficient details related to parameterization of SWAT model for different years should be included in the Model Setup. Like how catchment characteristics were obtained for different years for parameterization of the SWAT.
2. How catchment characteristics like land use/land cover, slope, soil, drainage etc., have been adopted for analysis period i.e. from 1980-2009, as these are very important for any hydrological phenomenon in addition to the meteorological parameters.
3. Simulated stream flow results show a high coefficient of variation. Therefore, extent of uncertainty in simulated stream flow results may also be given before commenting on usefulness of study.
4. China's Grain for Green project, represents the anthropogenic changes in hydrology, its impacts should be discussed and results of these impacts leading to conflict results.
5. Latest article by J. Yin et al. 2017 in HESS: Effects of land use/land cover and climate changes also shows the similar study results, this paper may also be referred here and results may also be compared in discussion, which strengthens the quality of this article.

In line 31: Model was calibrated for 10 years from 1960-69, validated for 1970-79 and even analysis is also a part of validation. Hence it is suggested to validate up to 2009. Large data used from 1960-09 (50yrs).

In line 37: What is soil flow, how it differs from base flow? Explain. In my view baseflow and soil flow were one and the same.

Discussion: Reforestation reduced the surface runoff because of vegetation cover and increased streamflow may be because of increase in baseflow that depends on land topography, forestation might be on hillocks. The impact of Grain for Green project shows the conflict results i.e. initially from 1969-1980 streamflow reduced and for present periods increasing. And also the Mountain rock regions, higher altitude variation including changing rainfall pattern with intensive storms too leading to higher stream flow.

Suggestions: One hydrological cycle represents for 30 years. In this study 50 years data used which is too large. Study may be restricted to latest 30 years i.e. 1980-2009. Calibration and validation may be carried out for the latest data as it represents' the real conditions specially rainfall distribution pattern.

Finally this article, Impact of LUCC on Streamflow Based on the SWAT Model over the Wei River Basin on the Loess Plateau of China by Hong Wang and Fubao Sun is worth of publishing in HESS with minor revisions as suggested.