



Sabita Shrestha

BSc Environmental Science, MSc Environmental Science

sabita.shrestha@griffithuni.edu.au

orcid.org/0000-0002-8875-9139

<https://www.researchgate.net/profile/Sabita-Shrestha-2>

<https://scholar.google.com.au/citations?hl=en&pli=1&user=jO-ykW4AAAAJ>

Summary

Land cover changes can have significant short and long-term spatiotemporal consequences on the hydrological components of a watershed, influencing essential features and processes. Land use/land cover change has an important role in the hydrological responses. Changing land use as a result of reduction in natural vegetation has larger impact on runoff increase. Due to the absence of a widespread agreement regarding the influence of changes in land use change especially due to land clearing on the hydrological regime, both within Australia and globally, there exists a need for increased endeavours aimed at comprehending the connection between land use change and the streamflow under different climate change scenarios. This improved understanding is crucial for making well-informed decisions related to efficient land utilization and the management of water resources. This research's overarching goal is to evaluate and precisely measure the impact of land clearance on the flow of streams within large catchments situated in regions characterized by water scarcity and arid climates, such as Central Queensland. The overall objective of my research is to improve understanding of the relationship between land use change and its impact on hydrological regime under the different scenarios of land use and climate change.

Research Expertise

- Hydrological modelling
- Hydrology
- Climate change
- Land use change