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# Simulating the implications of glaciers' retreat for water management: a case study in the Rio Santa basin, Peru

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## Abstract

This paper presents a model of Andean glacier hydrology which can be used to assess the water management implications of possible future glacier retreat. The approach taken uses the Water Evaluation and Planning (WEAP) system and integrates both hydrologic processes and representations of the operations of built infrastructure. The model is applied in the Rio Santa watershed in Peru to illustrate how alternative water management strategies can be simulated. The WEAP platform built for this study has been used to engage with local stakeholders for water management.