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Contribution ID: 810

Type: Poster (+) Presentation

Impact of operational factors on Aquifer Storage and Recovery (ASR) scheme in saline regions

Wednesday, 2 June 2021 16:00 (1 hour)

Groundwater depletion has been significant in the last half century. Different technical developments for expected groundwater replenishment known as managed aquifer recharge have been established to increase the groundwater level. Groundwater salinity is a major problem in many arid and semiarid regions of India where fresh water supplies are limited due to inadequate rainfall and long dry seasons. Modern ASR techniques, in which excess surface water is diverted to the underlying aquifers for eventual recovery, are used to effectively use water supplies in water-scarce areas, including salt-affected zones. The purpose of this study is to gain a better understanding including its operational process of groundwater storage and recovery. The impacts of various operational factors such as injection volume, injection and recovery rates, and storage duration of freshwater within saline aquifer are analysed and results are presented. The findings of this study would have a significant effect on the ASR scheme's operational phase, ensuring its performance and effective freshwater recovery.

Time Block Preference

Time Block A (09:00-12:00 CET)

References

Prof. Brijesh Kumar Yadav, IIT Roorkee

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Primary authors: Mr TIWARI, Shubhaam (IIT Roorkee); Prof. YADAV, Brijesh Kumar (IIT Roorkee)

Presenter: Mr TIWARI, Shubhaam (IIT Roorkee)

Session Classification: Poster +

Track Classification: (MS25) Subsurface Water Flow and Contaminant Transport Processes –Special Session in Honor of Harry Vereecken