

**Study of Stream Aquifer Interaction along River Ganges between
Hardwar and Narora using Isotope Techniques**

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ABSTRACT

The stream aquifer interaction has long been a problem of interest to the hydrologists as well as water resources planners. The isotope technique, both stable and radio isotope, are useful tools for studying the problem. Other conventional methods, such as establishing the flow net are also in use, but with certain limitations as to the velocity of the groundwater. The isotope techniques provide complete information required for the computation of quantity of water contributed by river or vice-versa.

The National Institute of Hydrology in collaboration with Bhabha Atomic Research Centre, Bombay, and U.P. Ground Water Department, Roorkee is executing a project to study the stream aquifer interaction along river Ganges from Hardwar to Narora using isotope techniques.

In this preliminary report information about the study area, objectives of the study, methodology to be adopted, a gist of work programme for the current project along with a small note on the progress to date has been presented. In the methodology, the different isotopic techniques available for studying the problem including sample collection, preparation, analysis and interpretation of results with comprehensive discussion on the choice of tracers have been given.