

## **ABSTRACT**

Format: Poster  
Title: **Calculating Return Flow and Well Depletion**  
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### Description:

Groundwater return flow and post-pumping well depletion have been often mentioned in Colorado during discussion of water use; however, they have seldom been given detailed explanation. The proposed poster would offer opportunity to contribute to remedy of that deficiency in discourse.

A principle of stream-aquifer system behavior essential to water administration is that flow through geologic deposits undergoes attenuation and delay. Engineering analysis of system dynamics is based on treatment of the groundwater flow equation. Available methods of calculation include: direct simplified solutions, developed by Robert Ellsworth Glover and others; specialized modeling software, developed by the United States Geological Survey; and the Delayed Impact Calculator, an Excel spreadsheet, programmed by the author to perform the calculations for many scenarios.

Interested individuals will be empowered to make their own calculations and further inform their water savvy with quantitative information.