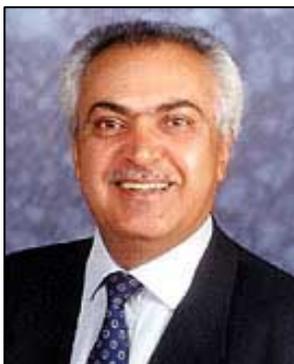


# Challenges and Limitations of Hydroclimatological Forecasting for Water Resources Management and Future Prospects

Frontiers in Global Change  
Seminar Series

Presented by...

## Professor Soroosh Sorooshian



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### Abstract:

In response to society's need for more effective tools to address hydrologic hazards and manage water resources systems, engineers and scientists have become more reliant on the use of predictive models and stochastic methods. Depending on the problems, the hydrometeorological information needed may range from hourly forecasts (i.e., in the case of flash floods) to seasonal to inter-annual (i.e., in the case of reservoir operation), and to decadal to century (i.e., in the case of long range water supply planning and structural designs). While there is a rich body of literature reporting on progress related to both, "weather-scale" and "climate-scale" hydrologic predictions, many challenges face the research community attempting to extend the lead time and accuracy of predictions.

More specifically, despite the progress in each of the three pillars of hydrometeorological prediction system (models, observations and parameterization) over the past several decades, the improvements in the overall forecast quality is yet to reach the users expectations. This presentation will provide a summary of both the progress and the related challenges. It will be a personal reflection of over threedecades of research and experience with hydrologic modeling and involvement with a number of international initiatives.

[CV for Professor Soroosh Sorooshian](#)

**Please join us for a meet and greet opportunity  
with Professor Sorooshian after the seminar.  
~Refreshments will be served~**

Date: July 23

Location: EMSL  
Auditorium

Time: 10:00 AM