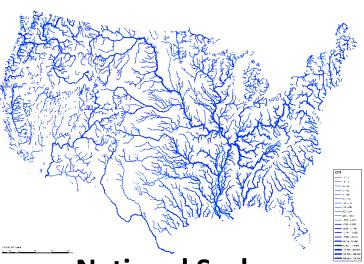
Center for Water, Earth Science and Technology (CWEST) Distinguished Seminar Series Presents

Lauren E. Hay

U.S. Geological Survey Denver, CO



Hydrologic Modeling on a National Scale





The United States Geological Survey (USGS) has developed a National Hydrologic Model (NHM) to support coordinated, comprehensive and consistent hydrologic model development, and facilitate the application of hydrologic simulations within the conterminous United States (CONUS). The NHM will provide accurate and consistent estimates of total water availability, changes in the timing and source of flow, and measures of the uncertainty of these estimates; essential elements in assessing the response of the Nation's watersheds and ecosystems to climate and land use changes at local, regional, and national scales.

The NHM structure includes (1) a consistent geospatial fabric for modeling; (2) daily and monthly time-step models; (3) the ability to subset and aggregate models (nested models); and (4) multi-basin, multi-step, multi-objective model calibration procedures. The NHM has the ability to address issues regarding the use of measured data sets from continental scale networks (e.g. streamflow and climate) and large-scale datasets (e.g. remotely-sensed data products). Methods for large scale parameter estimation, uncertainty quantification and calibration approaches are also being investigated at the continental scale with the NHM. Current results for CONUS will be presented.



Wednesday | April 13th, 2016 | 11-12

Light refreshments 12-12:30

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