Boase Seminar Series in Hydrology and Water Resources Engineering

Department of Civil, Environmental and Architectural Engineering



Aqua Incognita in the Colorado River in 2022 and Beyond

Mr. Brad Udall

Senior Water & Climate Research Scientist

Colorado Water Institute

Colorado State University

Fort Collins, CO, USA

Wednesday, September 15, 2021 | 11:30 AM | ECCE 1B41 & Zoom: <u>https://cuboulder.zoom.us/j/93058839188</u>

(passcode: water)

Abstract:

Since 2000, Lakes Mead and Powell on the Colorado River have lost over 60% of their water volume due to low inflows and high demands. The river provides water for approximately 4m acres of irrigated agriculture and water for over 40m Americans in every major southwestern city. River flows over the last 22 years have been about 20% below the 1906-99 average, and are expected to be further reduced as the climate continues to warm and likely dry in the 21st century. Despite declining flows, some entities want to build new projects which would increase depletions. 30 Native American Tribes have federal reserved rights to water yet some of these rights are large and remain unquantified. Current projections thru 2023 show the reservoirs hitting low levels not anticipated just a few years ago. The major agreements controlling reservoir operations expire in the next few years and will soon need to be replaced with new agreements. How did we get here? Where are we going? And how might we respond to these unprecedented conditions?

Speaker Bio: Brad Udall is a Senior Water and Climate Research Scientist / Scholar at Colorado State University's Colorado Water Center. He previously directed the Western Water Assessment at the University of Colorado and the Getches - Wilkinson Center for Natural Resources, Energy and the Environment at Colorado Law. He has spent much of his life focussed on the Colorado River, including serving as a river guide in the Grand Canyon on 45 trips.





Be Boulder.