



ANNUAL WATER SEMINAR

UNCERTAINTY: YOU CAN COUNT ON IT

9:00am -3:30pm, Wednesday, September 18, 2019, Colorado Mesa University/University Center

9:00 **WELCOME: DAVE MERRITT, CRD BOARD PRESIDENT; JIM POKRANDT, CRD COMMUNITY AFFAIRS DIRECTOR**

9:10 **“SNOW-POCALYPSE:” A 2019 FEAST AFTER A 2018 FAMINE — JEFF LUKAS, WESTERN WATER ASSESSMENT, COLORADO INSTITUTE FOR RESEARCH IN ENVIRONMENTAL SCIENCES, UNIVERSITY OF COLORADO**

The “Snow-Pocalypse” and overall wet conditions of water year 2019 were a complete turnaround from the severe drought of 2018 — though still only the fifth above-average runoff year for the Upper Basin since 2000. What factors led to the feast after the famine: Do dramatic year-to-year changes like 2018 and 2019, and 2011 to 2012, tell us that the hydroclimatic variability in the Basin itself may be changing — not just average conditions? And how might this inform management and planning, including the renegotiation of the 2007 Interim Shortage Guidelines?

9:35 **WHEN HYDROLOGY AND MANAGEMENT COLLIDE: HOW LAKE POWELL GOT HAMMERED — BRAD UDALL, SENIOR WATER AND CLIMATE RESEARCH SCIENTIST/SCHOLAR, COLORADO STATE UNIVERSITY’S COLORADO WATER INSTITUTE**

The 2007 Interim Shortage Guidelines established a drought-influenced operating plan for both Lakes Powell and Mead with the intent to balance their operations, depending on water levels in each. As it turned out, Lake Powell has been releasing more water to Lake Mead than was envisioned by modeling. What happened? The answer will be front and center as the Guidelines are renegotiated for operations beyond 2026. The science, politics and modeling assumptions will be tricky business.

10:15 **BREAK**

10:30 **DROUGHT CONTINGENCY PLANNING TODAY, RENEGOTIATING SHORTAGE RULES TOMORROW — JESSIE SMITH AND REBECCA KHAYA, BUREAU OF RECLAMATION, LOWER COLORADO REGION’S MODELING AND RESEARCH TEAM, BASED AT THE UNIVERSITY OF COLORADO; ANDY MUELLER, GENERAL MANAGER, COLORADO RIVER DISTRICT**

Jessie and Rebecca will address the Colorado River system status, including an update of the Drought Contingency Plan implementation in the Lower Basin; discuss how risk has changed since the 2007 Interim Guidelines; and summarize new and relevant science being developed by Reclamation to inform renegotiation of the Guidelines. Andy will give a Colorado River District perspective on Drought Contingency Planning, Demand Management feasibility work and what renegotiation of the Guidelines portends.

6 CLE credits approved for attorneys; 6 CE credits for Realtors

11:30 **SCIENCE BE DAMMED: WHAT WE KNEW ABOUT THE COLORADO RIVER WHEN THE 1922 COMPACT WAS SIGNED; THE ANSWER MAY SURPRISE YOU — ERIC KUHN, AUTHOR**

Eric and co-author John Fleck will have a book published this fall, "Science Be Dammed." It will show that accurate science of Colorado River flows was available to Compact negotiators but was overlooked in favor of politically influenced allocation numbers that have never been in long-term accordance with actual hydrology. This fact lies behind many of our Compact challenges today.

12:00 **LUNCH PROGRAM: MAKING THE CASE FOR THE GRAND BARGAIN — DOUGLAS KENNEY, DIRECTOR OF THE WESTERN WATER POLICY PROGRAM/UNIVERSITY OF COLORADO LAW SCHOOL**

If climate change results, as expected, in further reduction of average streamflows, and the Upper Basin states continue to send water downstream in accordance with Article III(d) of the Colorado River Compact, then the amount of water practically available to the Upper Basin users could drop precipitously. Should that occur, then the Upper Basin would find itself faced with a separate choice: Implement massive curtailments to users, or ignore or challenge Article III(d), and kick off years, if not decades, of interstate litigation. An option may be to negotiate a Grand Bargain with the Lower Basin.

1:30 **ACTIONS ON THE COLORADO RIVER HAVE CONSEQUENCES — ANNE CASTLE, FORMER ASSISTANT SECRETARY FOR WATER AND SCIENCE, U.S. DEPARTMENT OF THE INTERIOR, NOW A SENIOR FELLOW AT THE GETCHES-WILKINSON CENTER FOR NATURAL RESOURCES, ENERGY AND THE ENVIRONMENT AT THE UNIVERSITY OF COLORADO**

Many ideas and concepts are afloat about how to deal with the Colorado River and its challenges with supply, use and the environment. Anne will discuss how proposed solutions in one place could cause problems in another. Her commentary will cover current events, shortage renegotiations and the Grand Bargain concept.

2:15 **HOW MUCH WATER ARE WE DEPLETING IN THE COLORADO RIVER SYSTEM IN COLORADO AND WHAT'S AT RISK — DR. JOHN CARRON, HYDROS CONSULTING**

The four West Slope Basin Roundtables, concerned about their future ability to develop the Colorado River as well as protecting current water uses, commissioned the Colorado River Risk Study to develop data to inform policy discussion. The study is being carried out by the Colorado River District and the Southwestern Water Conservation District. The study found that if a drought on the severe order of 2002-2004 recurred, the risk of draining Lake Powell would be real – absent management measures to stem the risk. The Roundtables also wanted to know about how much water the basins are depleting and how the water rights stack up as pre-Compact and post-Compact. The dividing line makes a difference. John has the numbers.

2:55 **OF PRIMARY IMPORTANCE: SECONDARY ECONOMIC IMPACTS OF DEMAND MANAGEMENT ON WEST SLOPE COMMUNITIES — SONJA CHAVEZ, COLORADO RIVER DISTRICT AND THE WATER BANK WORK GROUP; DOUG JEAVONS, BBC RESEARCH & CONSULTING**

Demand management means not using water. Should demand management and water banking be implemented? How would demand management impact the economies of our diverse Western Slope communities? As the largest water user, will agriculture bear the burden of demand management? How do the types of crops and the amount of acreage available in each basin determine possibilities for temporary full or partial fallowing and what are the potential secondary economic impacts and various "tipping points?" The Colorado River Water Bank Work Group has been asking these very questions and will tell us more about what we know and what we hope to learn.

3:30 **End of Program**