



**Panel on 21<sup>st</sup> Century Water Infrastructure**

**BACKGROUND**

This agenda item will consist of a panel of guest speakers who will present and discuss recent studies on water infrastructure and operations. The studies describe possible outcomes of additional storage and integrated operations of the State's water system, and scenarios for potential water supply increases through reoperation of the State Water Project. The panelists will also discuss how the studies address climate change and system resiliency given the expected increase in extreme wet and dry years.

The purpose of the panel is to:

- Inform the Commission and the public of these studies;
- Inform the Commission that the existing system operations are optimized to meet existing regulatory and contractual commitments and reoperation would yield limited benefits;
- Consider the possible future availability of water if new storage projects are integrated into the State Water Project;
- Recognize the complexities regarding project integration with the State Water Project;
- Consider the role of data availability and quality in improving water management; and
- Identify issues and/or aspects of these studies that require further research or discussion.

***This is an informational item. The Association of California Water Agencies (ACWA) study presumes that several projects that applied for funds from the Water Storage Investment Program (WSIP) are built (Sites, Temperance Flat, Los Vaqueros Reservoir expansion, Centennial, Tulare Lake Storage, and Kern Fan), in addition to expansion of San Luis Reservoir and conjunctive use of the American River—neither of which are WSIP applicants. The Commission will need to avoid discussing the attributes or merits of any water storage projects that have applied for WSIP funding and limit itself to the broader topic of integration.***

## PANELISTS AND TOPICS

**Kamyar Guivetchi**, Manager, DWR Division of Statewide Integrated Water Management

Kamyar Guivetchi was appointed Manager of the Division of Statewide Integrated Water Management in August 2008 with the California Department of Water Resources (DWR). During his 39 years with DWR, Kamyar has worked on many technical and planning projects with the North-Central Region Office, Division of Planning, Bay-Delta Office, and Division of Environmental Services managing the Suisun Marsh Program. Kamyar manages the preparation of the California Water Plan Updates. He chairs the 30-member State Agency Steering Committee for preparing Water Plan Update 2018, and is the State Co-chair of the California Biodiversity Council's Executive Committee.

Mr. Guivetchi will discuss DWR's *Reoperation Study Phase III Report: Assessment of Reoperation Strategies*. This report is part of DWR's reoperation program, which aims to identify options for reoperation of the state's existing flood protection and water supply systems.

Reoperation Study Phase III Report: Assessment of Reoperation Strategies  
[http://www.water.ca.gov/system\\_reop/](http://www.water.ca.gov/system_reop/)

**Dave Bolland**, Director of State Regulatory Relations, Association of California Water Agencies

Mr. Bolland is Director of State Regulatory Relations for the Association of California Water Agencies (ACWA). Mr. Bolland serves as department manager overseeing water resources policy and state regulatory issues, and has special expertise in water resources planning and management, including water conservation and use efficiency, water recycling, and desalination, groundwater, and headwaters and watershed management. Prior to joining ACWA, David was a senior project manager for an environmental consulting firm for nine years. His local government experience also includes periods of service as a land use planner with a southern California municipality and a northern California county.

The Association of California Water Agencies (ACWA) commissioned a technical study to examine how California's water supply system could operate more flexibly and effectively with the addition and integrated operation of new storage capacity.

Storage Integration Study, June 2017:  
<https://www.acwa.com/wp-content/uploads/2017/06/2017-06-05-ACWA-Integrated-Storage-Final-Report.pdf>

Integration Study Brochure:  
<https://www.acwa.com/wp-content/uploads/2017/06/Water-Infrastructure.pdf>

**Roger Bales**, UC Merced, Director of Sierra Nevada Research Institute, Director of UC Water.

Dr. Roger Bales, Founding Professor of Engineering at UC Merced, has been active in water- and climate-related research for over 30 years. Dr. Bales has published well-cited papers in multiple disciplines, including hydrology, glaciology, paleoclimate, atmospheric chemistry, geochemistry and environmental engineering. His current work is contributing to California's efforts to both build the knowledge base and implement policies that adapt our water supplies, critical ecosystems and economy to the impacts of climate warming. He has led development of regional, national and international measurement programs that are critical for understanding climate change and contributing to climate solutions. Dr. Bales is also an Adjunct Professor at UC Berkeley, and a researcher in the Center for Information Technology Research in the Interest of Society (CITRIS).

Dr. Bales will comment on the ACWA and Reoperations studies' incorporation of climate change and resiliency in their analyses. He will also address the role of data quality and availability in improving integration of project operations and water management.

**Contact**

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