Position No. 509

RESOLUTION
of the
WESTERN STATES WATER COUNCIL
to Support the Use of
FORECAST INFORMED RESERVOIR OPERATIONS and INNOVATIONS
Washington, DC
March 14, 2024

WHEREAS, Western States experience great variability in precipitation, with serious impacts and consequences for the operation of water projects, particularly aging water infrastructure, as well as water supply and emergency planning and management, drought and flood preparedness and response, and other public and private decisions; and

WHEREAS, decisions to operate water projects to protect life and property by reducing flood risks, while at the same time maximizing water supply storage, including carryover storage, impact billions of dollars of economic investments in the West to maintain and protect municipal and industrial centers, agriculture, hydropower generation, and fisheries; and

WHEREAS, these investments depend on our ability to observe, understand, model, predict, and adapt to precipitation variability on operational time scales ranging from hours to days, weeks and months, seasons and longer; and

WHEREAS, observations, modeling, high-performance computing capabilities, research, and demonstration projects are essential to significantly improving operational forecasting of precipitation to maximize the use of our existing water storage projects to reduce flood damages, mitigate economic and environmental damages, and maximize water storage and water use efficiently; and

WHEREAS, operating aging water infrastructure effectively in the face of growing and often competing water supply and water management and flood protection demands requires that state, federal, tribal, and local agencies optimize operations and seek innovative alternative strategies to support their decision-making; and

WHEREAS, project operations and alternatives may include, but are not limited to, using enhanced forecasting capabilities to better inform reservoir operators, operations, and actions – to dynamically determine reservoir levels to improve storage opportunities, and to alter static reservoir operating rule curves and requirements based on updated hydrologic information; and

WHEREAS, FY20 appropriations legislation directed the U.S. Army Corps of Engineers (USACE) to develop a comprehensive list of water control manuals at Corps-owned projects located in states where a Reclamation project is also located, including a prioritized list of needed updates of those manuals; and

WHEREAS, Section 8109 of WRDA 2022 (P.L. 117-263) authorized USACE to update water control manuals for water resources development projects in states where the governor declared a statewide drought disaster in 2021, with priority given to projects that include water supply or water conservation as an authorized purpose; and

WHEREAS, USACE Engineer and Research Development Center (ERDC) developed a Forecast Informed Reservoir Operations (FIRO) screening process and has tested it in the South Pacific Division; and

WHEREAS, States have exclusive authority over the allocation and administration of rights to the use of surface water located within their borders and are primarily responsible for protecting, managing and otherwise controlling the resource.

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council supports the use of innovative and forecast informed reservoir operations by public and private entities at all levels to maximize the effective and efficient use of our existing and future infrastructure to benefit our myriad and growing economic uses of water, while at the same time balancing and protecting our need for public health and safety, as well as a resilient and healthy environment.

BE IT FURTHER RESOLVED, nothing stated in this position is intended to apply to the interpretation or application of any interstate compact, court decrees, international treaty or tribal settlement agreement.

Revised and Readopted
(see former Position No. 460, March 25, 2021, and No. 417, March 14, 2018)