

RESOLUTION of the WESTERN STATES WATER COUNCIL Urging Congress and the Administration to Support

SUBSEASONAL to SEASONAL WEATHER RESEARCH, FORECASTING, and INNOVATION

Reno, Nevada May 24, 2023

WHEREAS, Western States experience great subseasonal, seasonal, and annual variability in precipitation, with serious impacts and consequences for water supply planning and management, drought and flood preparedness and response, water rights administration, operation of water projects, and aging water infrastructure; and

WHEREAS, sound decision-making to protect life and property by reducing flood risks and to inform decisions involving billions of dollars of economic activity for urban centers, agriculture, hydropower generation, and fisheries depends on our ability to observe, understand, model, predict, and adapt to precipitation variability on operational time scales ranging from a few weeks to a season or more; and

WHEREAS, investments in observations, modeling, high-performance computing capabilities, research, and operational forecasting of precipitation provide an opportunity to significantly improve planning and water project operations to reduce flood damages, mitigate economic and environmental damages, and maximize water storage and water use efficiency; and

WHEREAS, operating aging water infrastructure in the face of growing and often competing water supply and water management demands requires that state, federal, tribal, and local agencies optimize operations for maximum efficiency and seek innovations, such as improved subseasonal to seasonal forecasting (S2S), to support their decision-making; and

WHEREAS, the responsibility for operational weather forecasting rests with the National Weather Service (NWS), and currently NWS has minimal skill in making S2S outlooks; and

WHEREAS, there is a need to prioritize National Oceanic and Atmospheric Administration (NOAA) research and weather modeling to improve operational sub-seasonal and seasonal precipitation forecasts, with attention to Western needs; and

WHEREAS, NOAA submitted a report¹ to Congress pursuant to Section 201 of the Weather Research and Forecasting Innovation Act of 2017 (P.L. 115-25) recommending pilot projects to improve S2S forecasts for water management in the western U.S.; and

WHEREAS, the Flood Level Observation, Operations, and Decision Support (FLOODS) Act of 2022 (P.L. 117-316) directs NOAA to improve S2S forecasting to support flood management.

¹ https://repository.library.noaa.gov/view/noaa/27408

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council supports the reauthorization of the Weather Act and its implementation, together with the FLOODS Act, authorizing federal action to improve precipitation forecasting at S2S scales in the West, and urges NOAA to move forward with pilot projects for improving S2S winter precipitation forecasting in the mountain west and summer precipitation forecasting in the Great Plains.

BE IT FURTHER RESOLVED that the Western States Water Council supports adequate Congressional appropriations directed toward the improvement of S2S forecasting.

(See also Position #441, 3/6/20; and #399, 4/14/17)