



**RESOLUTION
of the
WESTERN STATES WATER COUNCIL
urging the
ADMINISTRATION AND CONGRESS
TO SUPPORT WATER RESEARCH AND DEVELOPMENT PROGRAMS
at the
DEPARTMENT OF ENERGY NATIONAL LABORATORIES**

**Polson, Montana
August 5, 2022**

WHEREAS, the Western States Water Council (the Council) has long recognized that water and energy resources are interdependent – using one requires the other – and this presents a particular challenge in the West, where energy demand continues to rise while water supplies are increasingly stressed; and

WHEREAS, integrating, protecting, and wisely managing our national water and energy resources for the benefit of our present and future generations, is increasingly important; and

WHEREAS, one purpose of the Council is to accomplish effective cooperation among western states (and our federal partners) in the conservation, development and management of water resources; and

WHEREAS, a second purpose of the Council is to maintain vital state prerogatives, while identifying ways to accommodate legitimate federal interests; and

WHEREAS many watersheds are already fully-appropriated, and new stresses are emerging from climate, population growth, land use changes and water needs for energy development and production; and

WHEREAS, there is growing concern, particularly in the Arid West, over our ability to continue to supply water of adequate quality in quantities needed to sustain current and future uses, including energy, as well as agricultural, municipal and environmental uses; and

WHEREAS, the failure to provide for such needs would have significant regional and national consequences; and

WHEREAS, present water and energy resources planning and sound future decision-making depends on our ability to understand, monitor, anticipate and adapt to changing conditions; and

WHEREAS, electricity generation and other energy development is a significant driver of present and future water demands and the expertise and research of the national labs can supplement and enhance the ability of state, local and tribal water managers to understand and develop adaptation strategies; and

WHEREAS, water-related research at the Department of Energy's Office of Energy Efficiency and Renewable Energy, Office of and National Laboratories has included:

- exploring the energy-water nexus;
- highlighting energy-water-carbon nexus challenges and opportunities;
- developing unique multisector and multiscale model frameworks to address critical planning and operational decisions at the energy-water-land nexus;
- evaluating synergies between energy and water infrastructure to improve reliability and resiliency;
- understanding interactions among atmospheric particles, clouds, the land surface, and human activities;
- providing decision science, support and informatics for balancing water supply and demands;
- developing domestic water use projections;
- decreasing water and energy demands through efficient use;
- promoting sustainable groundwater management and storage opportunities while reducing cost and energy demands and insuring water quality;
- advancing next-generation hydropower and pumped storage systems;
- modernizing irrigation;
- increasing the safety, security, and sustainability of water infrastructure through the development of advanced technologies that create new water supplies;
- improving desalination membranes;
- managing water in a low-to-no snow future; and
- conducting research and development in hydrogen production, delivery, and storage for multiple end uses.

WHEREAS, such research should be guided by state needs as expressed in state water and energy planning documents and through state planning processes with a focus on water resource demands and water quality impacts; and

WHEREAS, in the West, States in compliance with State law have exclusive authority over the appropriation and adjudication of water rights for all uses, and the allocation of water for energy development, including the determination of whether or not there is any unappropriated water available for use.

NOW, THEREFORE, BE IT RESOLVED that the Western States Water Council urges the Administration and the Congress to recognize the value of Department of Energy hosted energy-water programs and research conducted at National Laboratories undertaken in collaboration with state water resources agencies, including but not limited to work at: the Idaho National Laboratory (INL); Lawrence Berkeley and Lawrence Livermore National Laboratories in California; Los Alamos and Sandia National Laboratories in New Mexico; the National Renewable Energy Laboratory (NREL) in Colorado; and Pacific Northwest National Laboratory (PNNL) in Washington, that collaboratively links federal energy research programs and water issues of concern to the western states.

BE IT FURTHER RESOLVED that the Western States Water Council urges the Administration and the Congress to encourage collaboration and cooperation between the National Laboratories and other federal agencies, including but not limited to the National Oceanic and Atmospheric Administration (NOAA), U.S. Bureau of Reclamation (USBR) and U.S. Geological Survey (USGS) to leverage federal expertise and resources (including supercomputing power; climate and precipitation site sensitivity analysis; systems analysis, integration, and security, etc.) in addressing the Nation's water-related challenges.

BE IT FURTHER RESOLVED that the Western States Water Council urges the Administration and the Congress to recognize the primary role of the States in allocating water for energy.