On July 17-19, the American Water Resources Association (AWRA) held its 2023 Summer Conference: Connecting Land and Water for Healthy Communities in Denver, Colorado. Around 250 academics, consultants, federal, state and local government officials, and private non-profit entities participated in 40 separate sessions on a broad range of topics including agricultural irrigation practices, aquifer recharge, basin studies, climate change, Colorado water planning, drought resiliency, equity issues, floods and hurricanes, growth and water development, housing and economic development, integrating land and water policy and planning, modeling and forecasting, tribal clean water access, water budgets, water data innovation and tools, water and wastewater infrastructure, and water markets.

Brenda Ortigoza Bateman, Director of the Oregon Department of Land Conservation and Development (and formerly Science Chief and Senior Policy Advisor at the Oregon Water Resources Department) served as the Conference General Chair. The conference began with recognition of the indigenous people of Colorado and a tribal prayer and blessing by Miss Grace, a member of the Arikara tribe of North Dakota. Her father, George Gilette, was Chairman of the Mandan, Hidatsa and Arikara (MHA) three affiliated tribes and was present at the signing of the Garrison project authorization, leading to the damming of the Missouri River and creation of Lake Sakakawea, forcing the sale and inundation of tens of thousands of acres of tribal lands.

WSWC Executive Director Tony Willardson served on the planning committee. He organized and moderated the opening plenary session on Federal Agencies Working Together: The Water Policy Committee. The panel included: Michael Connor, Assistant Secretary of the Army (Civil Works); Dr. Sarah Kapnick, Chief Scientist, National Oceanic and Atmospheric Administration (NOAA); Gloria Montano-Greene, U.S. Department of Agriculture (USDA), Deputy Undersecretary, Farm Production and Conservation (FPAC); Dr. Julie Robinson, Deputy Director, Earth Science Division, National Atmospheric and Space Administration (NASA); and Gary Gold, Deputy Assistant Secretary for Water and Science, U.S. Department of the Interior (DOI).

Connor mentioned his heritage as an enrolled member of the Taos Pueblo in New Mexico. He emphasized changing how business is conducted with Tribal Nations, including strengthening Nation-to-Nation relations. He also noted the Administration's historic commitment to infrastructure projects, via the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), that will strengthen our economy, protect people and property, and restore key ecosystems. He also described work on forecast informed reservoir operations (FIRO).

Kapnick's responsibilities cover weather, oceans, fisheries, and climate. She is an expert and leader on seasonal to decadal variability and predictability and addressed sub-seasonal to seasonal (S2S) precipitation and climate prediction, as well as climate and orographic impacts on mountain snowpack and extreme storms. Hurricane and climate risk, including economic impacts, are also part of her portfolio.

Montano-Greene highlighted the role of USDA, particularly the Natural Resources Conservation Service (NRCS), in delivering farm program services, specifically mentioning the Western Water and Working Lands Framework for Conservation Action. She also mentioned the importance of the nation's forests and USDA watershed programs, as well as the National Water and Climate Center's snow survey and water supply forecasting program, and the Soil and Climate Analysis Network (SCAN) monitoring soil moisture.

Robinson noted the critical nature of earth observations for land and water management, and the work of NASA's Western Water Applications Office. NASA is responsible for launch management for the Landsat Next mission, with a trio of smaller satellites that can each detect 26 wavelengths of light and thermal energy. She also described NASA's Soil Moisture Active Passive (SMAP) satellite that maps global soil moisture (as well as detects whether soils are frozen or thawed), as well as its Global Precipitation Measurement Mission that has also been used to track water-borne disease.

Gold discussed the role of the U.S. Bureau of Reclamation and the U.S. Geological Survey (USGS) in providing water for agriculture, municipal and industrial use, promoting water reuse, desalination, and streamflow data, and research on water issues. The Colorado River and our changing climate and environment have dominated the news, as well as interstate and international discussions over the future of water in the West. He noted the unprecedented BIL and IRA investments in water infrastructure, as well as the needs of tribes, and other disadvantaged communities.

As background for the Water Policy Committee discussion, Tony provided a brief history of regional and national water planning beginning with the Water Resources Planning Act of 1965, the same year the WSWC and AWRA held their first meetings, followed by the 1973 National Water Commission report, and more recently the Obama Administration's White House Water Summit and 2016 Commitments to Action on Building a Sustainable Water Future, President Trump's 2018 Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West, as well as a 2020 Executive

Order on Modernizing America's Water Resources Management and Water Infrastructure, and enactment of the 2022 FLOODS Act codifying the creation of the Water Policy Committee. The Committee is comprised of Secretaries and Administrators or their designees of seven federal departments and agencies with water resources related responsibilities that is charged with coordinating their efforts.

Specific areas of focus for the Committee include: water storage, supply, reliability and drought resiliency; integrated planning for federal infrastructure investments; flood control and wastewater management; water quality, source water protection and nutrient management; restoration, reuse, and desalination; water research, forecasting, data management and modeling; and workforce development.

Of note, Adel Abdallah presented at the conference of the WSWC's Water Data Exchange (WaDE) and Western States Water Data Access and Analysis Tool (WestDAAT), as part of a session on Innovative Data Platforms and Tools for Western Water.

Tony also organized and moderated a panel on Dealing with Drought that included representatives of the National Drought Resiliency Partnership, led by Army Civil Works and USDA, as well as the National Integrated Drought Information System (NIDIS), under NOAA.