CONGRESS/WATER RESOURCES

Infrastructure

On March 5, a group of Senate Republicans, led by Senator Roy Blunt (MO), introduced the Lower Missouri River Flood Prevention Program Act (H.R. 3403) to require the U.S. Army Corps of Engineers (Corps) to develop a comprehensive system of water resources development projects, to reduce flood risk and improve protections along the Missouri River, encompassing 735 miles from Sioux City, IA to the mouth of the river. In 2019, historic flooding damaged infrastructure, agricultural lands and homes in the region, some due to failing levees, resulting in billions of dollars in damages. Co-sponsors include: Senators Joni Ernst (IA); Chuck Grassley (IA); Deb Fischer (NE); Ben Sasse (NE); Jerry Moran (KS); Pat Roberts (KS); and Josh Hawley (MO).

Blunt said: “This bill will give the [Corps] the ability to develop a comprehensive system plan to design and build critical flood control projects that will do a better job of protecting people and property.”

The bill would authorize the Corps to implement projects costing less than $75M without Congressional approval, streamlining feasibility studies and project planning. It would authorize $500M for planning, design and construction of projects, with a federal cost share of 80%. It requires consultation with states, tribes, federal agencies, and stakeholders.

Fischer said: “The federal government can do a better job of protecting our communities from these extreme weather events. Our bill would improve and streamline the [Corps’] planning and construction for flood control projects in the Lower Missouri River Basin.”

“Invasive Species

On March 4, the Senate Energy and Natural Resources Committee Subcommittee on Water and Power held a hearing to examine the impact of invasive species on Bureau of Reclamation facilities and water management in the West. Several witnesses dealt with invasive species ranging from quagga mussels and milfoil to cheat grass and salt cedars. Western Governors’ Association (WGA) submitted written comments that highlighted the recommendations in its Biosecurity and Invasive Species Initiative Special Report and WGA Policy Resolution 2019-06, Biosecurity and Invasive Species Management.

WGA wrote: “The spread of invasive and non-native species affects nearly every aspect of life in the West. As invading species replace native plants and wildlife, the ecosystems, economies and communities that depend on the West’s natural resources are damaged and diminished, sometimes permanently…. Invasive quagga and zebra mussels are of particular concern, as these invaders annually result in millions of dollars in lost economic activity and cause significant environmental damage to waterbodies in the West…. To adequately protect the West from the movement of aquatic invasive species, federal agencies must be able to act as full partners in invasive species containment efforts and have the funding and authorities necessary to contain invasive species within lands and waters under their jurisdiction. To this end, federal agencies, including BLM [Bureau of Land Management], BOR [Bureau of Reclamation], and NPS [National Park Service], should be vested with clear authority to manage watercraft upon their departure from infested waterbodies under federal jurisdiction.”

The witnesses discussed how various waterbodies have been impacted by invasive species, and the efforts they have engaged in to mitigate the spread and impacts of these organisms. All testimonies mentioned the critical importance of state, federal, and regional collaboration and coordination, and adequate funding for federal agencies to engage as partners with States on this issue. There was also a focus on the economic implications of these species, from impacts to tourism to
disruption of water, wastewater and hydropower infrastructure.

Stephanie Criswell, Coordinator, Montana Invasive Species Council and Vice Chair of the WGA Western Invasive Species Council, said: “The damage to North American power plants and municipal drinking water systems can reach as high as $1 billion per year. If the mussels spread to the Columbia River Basin – the last major uninfested water system in the continental U.S. – the control and mitigation costs to hydropower facilities in the Basin alone could reach $500 million annually.”

Michael Preston, External Relations, Dolores Water Conservancy District in Colorado, said: “The Stop the Spread of Mussels Act of 2019 is vitally needed” to ensure inspection programs engage federal, state and other partners and allow them to work together to secure the needed funding to make them successful.

Others who testified included: Julie Regan, Chief, External Affairs and Deputy Director, Tahoe Regional Planning Agency; Jackie Meck, Mayor, Buckeye, Arizona; and Scott Cameron, Principal Deputy Assistant Secretary, Policy Management and Budget, Department of the Interior. See: https://www.energy.senate.gov.

U.S. Geological Survey

On March 10, the House Natural Resources Subcommittee on Energy and Mineral Resources held an oversight hearing examining the policies and priorities of the U.S. Geological Survey (USGS), Bureau of Land Management (BLM), and others. Dr. Jim Reilly, Director, USGS, testified about the science agency’s past, present, and future missions, from mapping and assessing mineral resources and hazards to forecasting water quantity and quality. “We also operate satellites that have given us an almost 42-year continuous record of land surface data critical to understanding our constantly changing world.” He said by harnessing the emerging power of artificial intelligence, machine learning, and cloud computing, information can be integrated and delivered more quickly.

Reilly stated the FY21 budget request of $971M, includes $22M for cooperative mapping with states and $80M for the National Geospatial Program, working toward the first baseline national Light Detection and Ranging (LiDAR) data coverage by 2025. Other requested funds would cover energy and mineral resource science and tools to understand and respond to geologic hazards. “This budget will support the operation of over 8,400 streamgages, 3,000 earthquake sensors, and two satellites: Landsat 7 and 8.”

He noted that Landsat 7 is reaching the end of its useful life, and will be replaced with the launch of Landsat 9. USGS is working closely with NASA to develop future Landsat missions to continue collecting data. “Examples of new applications for Landsat data are mapping wildfire burned areas and recovery, and monitoring the spread of harmful algal blooms, or HABs. Distributing these large volumes of image data requires extensive IT infrastructure, and the almost five decades of Landsat data we have archived will be of great value to our future [Earth Mapping Resources Initiative] work.”

The Earth MRI was initiated in FY19, and uses the combined efforts of LiDAR, magnetic surveys, satellites, and unmanned aerial vehicles for higher resolution views of the surface and subsurface of the planet, which will be publicly available. The high-resolution Earth MRI data coupled with high performance computing “will allow us to identify undiscovered faults, unmapped mineral resources, quantify our water resources, and help inventory and model our complex ecosystems.”

CONGRESS/WATER QUALITY

PFAS

At a Senate Armed Services Committee hearing on March 3, Senators Martin Heinrich (D-NM) and Jeanne Shaheen (D-NH) expressed frustration with the Air Force and their response to per- and polyfluoroalkyl substances (PFAS) found in drinking water near military bases specifically Clovis, New Mexico where Cannon Air Force Base is located. PFAS are a key ingredient in firefighting foam and is widely used for extinguishing fires. Air Force Secretary Barbara Barrett responded that they are no longer using foam with PFAS in training exercises and are working to clean up the chemicals found in communities near the bases. In the National Defense Authorization Act of 2020, the Navy was directed to develop alternatives to the PFAS foam, but Barrett said that the Navy’s efforts have not yet resulted in a suitable replacement.

On March 4, the Environmental Working Group (EWG) published a study in the International Journal of Environmental Research and Public Health that found that 26 types of PFAS all display at least one characteristic of known human carcinogens, and that PFAS was found in the drinking water of dozens of U.S. cities. A separate study from the National Atmospheric Deposition Program at the University of Wisconsin-Madison also recently found that PFAS chemicals are entering rainwater, potentially through direct industrial emissions and firefighting foams, and flowing into surface waters. However, very little is known about the atmospheric concentrations and deposition of PFAS in waters. This raises concern that PFAS could be contaminating waters far from the source of the chemicals. EWG scientists believe PFAS is likely detectable in all major drinking water supplies in the U.S., especially those that use surface waters.