

STATEMENT OF JIM KALITOWSKI, CHAIRMAN
MUSSELSHELL – JUDITH RURAL WATER SYSTEM
BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
NATURAL RESOURCES SUBCOMMITTEE ON WATER, OCEANS AND WILDLIFE

WOW 101: The State of Western Water Infrastructure and Innovation

Chairman Huffman, Republican Leader McClintock and members of the House Natural Resources Subcommittee on Water, Oceans and Wildlife, my name is Jim Kalitowski and I serve as Chairman of the Central Montana Regional Water Authority (CMRWA) which has been working on the Musselshell-Judith Rural Water System (MJRWS) project in Montana. I also serve as a councilman for the City of Harlowton, Montana.

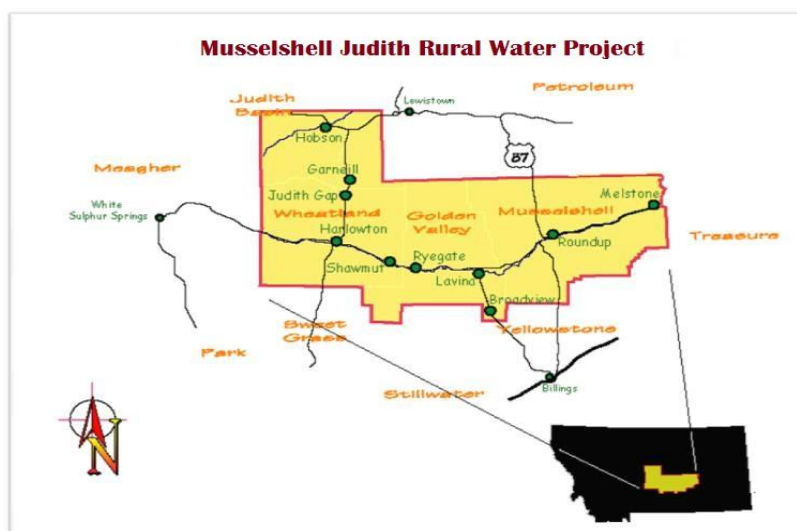
On behalf of the CMRWA, I wish to thank you for the opportunity to submit a statement on the state of western water infrastructure and innovation as Central Montana is in critical need of drinking water infrastructure.

U.S. Representative Greg Gianforte has again introduced legislation (H.R. 967) to authorize our Musselshell-Judith Rural Water System, which will allow the State of Montana and the federal government to build a regional water system to provide our citizens with safe, clean drinking water and secure the most basic of human needs in our communities. This bill has bi-partisan support as Senators Tester and Daines introduced identical legislation in the U.S. Senate – the same legislation that passed the Senate Energy and Natural Resources Committee last year. Enclosed please find a Montana Congressional Delegation letter supporting this legislation. I urge you to pass this bill into law so that Montanans can secure the most basic of human needs in our communities – drinking water.

Representative Gianforte's Clean Water for Rural Communities Act, H.R. 967, will provide the legal mechanism for construction of the Musselshell-Judith Rural Water System. H.R. 967 is consistent with the Rural Water Supply Act of 2006 that authorized the Secretary of the Interior to establish and implement a Rural Water Supply Program. The Rural Water Supply Act requires the completion of a comprehensive planning process including an Appraisal Report and Feasibility Report. The Musselshell-Judith project received approval for its Appraisal Report in 2010 and received approval for its Feasibility Report in January 2015. **This is significant because the Musselshell-Judith Rural Water System is the first to complete the entire planning process prescribed under the Rural Water Supply Act of 2006.**

State of Western Water Infrastructure -- Project Need

The Central Montana Regional Water Authority (CMRWA) is a coalition of eight incorporated communities, several unincorporated communities and many rural family areas within six counties in central Montana.



Examples of drinking water challenges currently faced by members of the Authority include the following:

- The City of Roundup obtains its water from a coal mine and the water is so mineralized that it is nearly undrinkable. Iron content is nearly five times the Safe Drinking Water Act standard. Almost all residents buy bottled water and/or use costly in-home reverse osmosis units (over 95% of residents in Roundup purchase bottled water). The multi community survey indicated that 69% of residents within the regional water system area purchase bottled water. In addition, residents are forced to operate water softeners because the water is so corrosive to appliances. Flood damage included losing the water main beneath the river connecting the wells to the infiltration gallery requiring costly emergency repairs to the system. With the wells and infiltration gallery being within the flood plain, this is an issue that the City will continue to deal with in the future.

Roundup Water



- The Town of Melstone has nearly run out of water several times in the last decade as flows in the Musselshell River approached zero. They have recently decided to decommission their surface water treatment plant and rely solely on their groundwater wells. They constructed two new wells in 2011 with moderate capacities; however both are contaminated with iron bacteria which will require ongoing treatment.
- The Town of Broadview has historically operated two deep, low production, and poor quality wells. If either well were to go out of service, the Town would not be able to meet the average day flow needs of the community which is a significant public health and safety threat to the residents. The two newest wells are also deep (over 1,000 feet) and low production (15 and 20 gpm) and were completed in 2014. While this has added additional capacity to the system, it is not sufficient. The water is extremely mineralized and corrosive so most residents drink bottled water.
- The Town of Harlowton has wells with high sulfate content that make the water very difficult to drink without treatment. Additionally, in recent years one of the town's main production wells (Pritchard Well) began delivering a high volume of black particulate forcing the Town to shut it down and only use it when needed to meet maximum day demands. The Town also had to take one well (South Well) offline during the 2011 flood because of surface water flooding at the well site. Finally, the only other well the city

owns (Thompson Well) is threatened by an underground storage tank leak which has resulted in detectable levels of benzene in the well.

- The Town of Hobson has transient non-community public water systems and residents utilizing groundwater from a shallow aquifer with high levels of nitrates. Frequently, these concentrations have exceeded the enforceable standards.
- The Town of Lavina has a history of autonomous non-community public and private water systems, which have been identified as containing high levels of nitrates.

State of Western Water -- Health Effects of Existing Water Quality

A summary of some of the existing water quality issues and the corresponding impacts on health faced by members of the CMRWA include:

Nitrates. High levels of nitrates in drinking water present a significant threat to public health and safety, especially to infants under 6 months of age. Infants that ingest drinking water with nitrates above the EPA's primary maximum contaminant level could contract a serious illness and, if untreated, may die. Known symptoms include shortness of breath and blue baby syndrome.

Iron. Although iron represents a vital mineral in every healthy individual's diet, the level of iron ingested should be controlled. Indeed, a sustained long term heavy dose can be detrimental to one's health. People with a condition known as Hemochromatosis are the most susceptible to potential harmful effects caused by the long term exposure to high concentrations of iron in drinking water. Early symptoms of the disease include hair loss, impotence, abdominal pain and shortness of breath. Symptoms become increasingly severe as the disease progresses, causing diabetes, heart failure and even death. It was estimated in a CDC publication from 2002 that approximately 1 in every 250 to 300 people suffer from the symptoms of Hemochromatosis. There are no known cures for Hemochromatosis and once the liver or heart has been damaged due to the progression of the disease, treatment can stop additional damage but cannot reverse it.

Sulfate. High concentrations of sulfate in drinking water contribute to a poor aesthetic quality and can also produce a laxative effect for those who ingest it. Some individuals can, however, overcome this condition after becoming acclimated to the water. Most of the communities within the region have documented levels of sulfate of at least twice the recommended limit.

Sodium. Most of the water supplies in the planning area have very high concentrations of sodium. Acute effects of excessive salt intake include nausea, convulsions, muscular twitching and rigidity, cerebral and pulmonary edema and can aggravate people suffering with chronic congestive heart failure

State of Western Water -- Reliability of Water Supplies

In general, the reliability of the existing water supplies of member communities is questionable. Several of the communities have experienced water shortages or are very susceptible to that situation due to the precarious condition of their supply infrastructure. Lack of access to a reliable water supply obviously represents a significant public health and safety risk to the residents of this region.

State of Western Water -- Financial Need

Reclamation prepared a Socioeconomic Study on the planning area as part of the final Feasibility Report. The study shows that the area has a very low Median Household Income (MHI). The MHIs of member communities ranged from \$21,838 to \$43,750 per year. This is significantly below both Montana's and the federal MHI, which points to a very strong need for federal financial assistance on this project.

State of Western Water – MJRWS Project History

The CMRWA was formed in 2004 to address the significant drinking water issues in the region. The CMRWA has been planning the Musselshell Judith Rural Water System for **fourteen years** with the goal to provide communities and rural residents in the region with a reliable supply of high quality drinking water from the Madison Aquifer groundwater.

The project will utilize a 250 mile piping system to deliver water to users. Once water is pumped out of the proposed wells the entire system will be fed by gravity except one area (Broadview) which requires a small booster pumping station. The system design is simple yet very efficient for energy use and operations since no treatment plant is required. The groundwater meets all Primary and Secondary Federal drinking water standards. The water will require no treatment except chlorination.

The CMRWA completed its first test well in 2005 which demonstrated that an adequate quantity of high quality water could be developed from the Madison Aquifer for the CMRWA members. The CMRWA initiated work on the Appraisal Report in 2007 and obtained approval for the Appraisal Report from Reclamation in 2010. Evaluation of water supply alternatives completed during the first phase of the Feasibility Report recommended that the well field be developed northwest of Judith Gap, Montana called Ubet. The CMRWA completed a test well at this site in 2012 with State, Federal and local funds. The test well demonstrated that an adequate quantity and quality of water was available at this site.

Based on the Ubet test well information, the CMRWA filed for and received the full water rights for the project in 2014 from the State of Montana. The test well information also allowed for the completion of the first draft of Feasibility Report which was submitted to Reclamation in July 2013. **After working through a vigorous and multi-level review process by Reclamation, the CMRWA was able to obtain final approval for the Feasibility Report in January 2015.**

Reclamation determined that the water project meets the requirements outlined in Reclamation's Directives and Standards, meets the requirements outlined in the Economic and Environmental Principles and Guidelines for Water and Related Resources Implementation Studies (Principles and Guidelines), meets the National Environmental Policy Act, Endangered Species Act, and National Historic Preservation Act, and the project has a benefit cost ratio of 1.28:1 which meet the Principles and Guidelines requirements for wise federal investment under the National Economic Development (NED) assessment. **Now we need Congress to pass H.R. 967 so that construction may begin.**

State of Western Water Innovation

- The Musselshell Judith Rural Water System will solve the municipal water problems for up to nine communities and numerous rural users along the pipeline route.
- Recent years of flooding in river basins of the member communities continues to challenge **current** water source reliability due to loss of infrastructure . The source of water for the Musselshell Judith Rural Water System is from the recharge area of a groundwater aquifer that will not require conventional water treatment and won't be directly affected by future flooding. This new water supply meets all State and federal drinking water standards on its own, it just has to be pumped and routed to the people.
- After pumping from the water supply wells, the majority of the system users will be fed by **gravity** making the system simple and efficient to operate and maintain.
- The Bureau of Reclamation determined the project has a benefit to cost ratio of 1.28:1 proving that the project is a good federal investment. The project is one of only two projects in the nation that successfully completed the Federal Planning process outlined in the Rural Water Supply Act of 2006.
- The MJRWS Climate Change Analysis (Appendix 19 to the project Feasibility Report) projects a moderate increase in precipitation and runoff over future periods (stable recharge). The project has met all federal National Environmental Policy Act requirements.
- The project will include fiber optic cable along the pipeline route for precise management and control of the system. Fiber optic lines also open the possibility of remote meter reading and monitoring from a central point, integrated with central billing and leak detection. This will improve system efficiency.
- In line electric turbines may be used to create a net metering option to mitigate part of the electrical operations cost of the system.

In conclusion, it is obvious that the residents, institutions and businesses of this region face significant deficiencies with the existing water supplies. These deficiencies impact the health and safety of residents across this region of Montana. The deficiencies with the water supplies also have a significant economic impact on these communities which have Median Household Incomes among the lowest in Montana. The CMRWA has already spent over \$2 million dollars of State, local and Federal funding on the project to date for test well construction, engineering, planning and administration of the project. We sincerely hope this proves to be a wise investment with the continuation and ultimate completion of this project.

We applaud your focus on the state of Western Water and urge the Committee to help Montanans by passing H.R. 967 into law. An adequate quantity of safe drinking water is a basic human need that most Americans take for granted. Please support our efforts to secure a system that will deliver that same promise to our citizens.

For more information please visit CMRWA's website at <http://www.centralmontanawater.com/> or contact the project engineer, Bob Church, at rchurch@greatwesteng.com or the project administrator Monty Sealey at pmservices@midrivers.com.



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