Written Testimony of Jerry Meissner, Chairman of the Dry-Redwater Regional Water Authority U.S. Senate Energy and Natural Resources Subcommittee on Water and Power Hearing June 18, 2015

I appreciate the opportunity to discuss the Dry-Redwater Regional Water Authority's support for both S. 1552, the Clean Water for Rural Communities Act (which will authorize our Dry-Redwater Regional Water Authority System), and S.1365, the Authorized Rural Water Projects Completion Act.

The Dry-Redwater Regional Water Authority System – also called DRWA – is a rural water project in Eastern Montana with a current service area of approximately 11,000 square miles covering the Montana counties of McCone, Richland, Dawson, Prairie and Garfield. In addition, our Water System will service McKenzie County, North Dakota which sits atop the Bakken Shale play and is North Dakota's leading oil producing county, with more than 2,300 currently producing wells on file and the highest number of active oil rigs on a month-to-month basis. This Bakken boom has brought a population increase both to North Dakota and to our Eastern Montana communities, increasing the stress on our drinking water situation.

This part of Eastern Montana does not, historically, have good water quality. Simply stated, the water is unsafe to drink. Therefore in 2002 a steering committee of volunteers was formed to bring safe and clean drinking water to our citizens – and the Dry-Redwater Regional Water Authority became a legal entity in 2005. We have spent 10 years working to provide much needed clean drinking water to this service area of approximately 15,000 people. We sincerely hope this is the year for our legislation to be passed into law so we may go forward with our plans to provide something that is often taken for granted in most areas of the United States – safe and clean drinking water.

The majority of the proposed communities to be served are currently operating their own municipal water systems. All of the communities are using wells as a source of water, but these wells are not providing the quality or quantity of water needed. These small rural towns cannot afford to build, operate, maintain and replace their own water treatment facilities and face limited availability of water sources. Therefore we strive to construct a regional rural water system that will allow these small communities to work together to provide access to a reliable, safe, and high quality water supply. DRWA uses a regional approach to improve service, reduce environmental impacts and capture financial benefits while reducing costly duplication of services. This regional system will provide a supply-managed water service to customers in a fiscally responsible manner.

Allow me to provide some examples of the problems Eastern Montanans currently face. The public water supply systems within our boundaries presently are unable to meet the requirements of the Safe Drinking Water Act without expensive energy intensive treatment options. According to the Montana Department of Environmental Quality (DEQ), one of our public water supply systems is out of compliance with the Federal Clean Water Act due to levels of secondary contaminants – sodium and total dissolved solids. Many of the existing systems treat their water with chlorine which in turn has caused problems with elevated levels of disinfection by-products. Other systems have problems with bacterial contamination and elevated levels of total dissolved solids, iron, manganese, lead, copper, sulfate and sodium that render the water undrinkable.

Three communities must treat their water because of high levels of fluoride which is a health hazard and a regulated contaminant. Jordan does not treat its water but it is high in sodium and total dissolved solids which are not currently regulated, but have detrimental effects on those drinking it. Fairview has high organic levels in its water that has led to a disinfection by-product violation and the Town operates an iron and manganese removal water treatment facility that uses chlorine as the oxidizer; which, while effective at removing the iron and manganese, does have the problem of forming disinfection by-products.

One well serves the students and faculty of the Garfield County School District No. 15. This well shows excess sodium and fluoride levels. And, the total dissolved solids are more than twice the recommended level. This well and the other private wells are not regulated by National Drinking Water Standards but the detrimental effects of the water on their users are not any less because they are not regulated. The rural residents in the project area currently obtain their water, in the majority of instances, from private wells. Many rural residents haul all of their drinking and cooking water used, either because their well water is undrinkable or there is not a sufficient quantity to be usable. The treatment of water in a private well is very costly and sometimes complicated depending on what is in the water. Based upon preliminary review of the water quality in the wells of rural users we know the majority of them do not have access to the quality of water needed for a healthy existence. Attached is a spreadsheet documenting the quality of water samples from various wells within our service area.

A regional rural water system will allow the small communities to come together and provide citizens with access to a reliable, safe, high quality water supply. From a regulatory aspect a regional water system has significant benefits. At the present time, there are six different regulated public water systems within the region that are meeting regulatory requirements of the Safe Drinking Water Act. When a rule changes, all systems must react to the change, individually. That means that the Montana Department of Environmental Quality is perennially facing problems with compliance issues in these smaller public water systems as they have a reduced capacity to maintain and operate due to their size. A regional water system would provide one point of regulation for all of the member systems. If a rule were changed, it would only affect one treatment plant and, due to economies of scale, a regional system can be upgraded and operated at a higher level of oversight and management at a smaller per user cost than smaller individual municipal water supply systems. An increased degree of compliance can be expected from a regional water system which further assures the water users of a safe and reliable source of water.

The water for this project will be obtained from the Dry Arm of Fort Peck Lake near Rock Creek. Just under 4,000 acre feet of the 18 million acre feet has been granted to DRWA via MT Water Right 40E 30064997. The intake and conventional surface water treatment facility will be located at North Rock Creek on the Dry Arm of Fort Peck Lake, in McCone County. Currently, about 11,000 users have completed applications for service and have paid 'good intention' fees to show their financial commitment. The State of Montana has invested over \$800,000 into studies and organizational efforts to date. In addition, DRWA has matched more than \$450,000, and the Bureau of Reclamation has contributed \$120,500. Total investments into DRWA to date exceed \$4 million, including the funding provided by Richland County to help build DRWA's currently active Sidney South pipeline.

The project as conceptualized will consist of over 1,220 of miles of pipeline, 38 pump stations, and 20 major water storage reservoirs. The 2012 Feasibility Report projected a total project cost of \$233,201,300, but as it is 2015 we must add for inflation. The DRWA is pursuing federal funding of 75% of the project cost with the remaining 25% of funds pursued in the form of a low interest loan from the Rural Utility Service (12.5%) and a grant from the Coal Tax Trust Funds (12.5%) administered through the Montana Department of Natural Resources and Conservation. Working together, the communities in the area can more efficiently and effectively provide affordable safe and reliable water to the people of the area.

The Dry-Redwater Regional Water System is also financially feasible given the funding packages currently used by the rural water systems in Montana and in comparison to rural water system costs in our three state region of Montana, South Dakota and North Dakota. The completed feasibility study includes preliminary engineering analysis of the system and the DRWA has also completed some preliminary cultural and environmental reviews. There are no fatal flaws found in these preliminary studies which included contacts with State, Federal and Local officials on NEPA compliance.

There are distinct benefits of a regional water system in our area:

- Communities will not absorb the costs of upgrading numerous smaller water facilities to keep up with water quality standards.
- A greater number of regional system users helps defray the cost of good water for every individual in the area.
- This system will provide jobs, not only during construction, but also for ongoing operation and maintenance.

- Economic and community development opportunities with the ability to attract businesses and people that need a reliable water source are greatly enhanced.
- Total water and energy consumption by all communities will be substantially less than if each community provides water treatment.
- A dependable, high-quality drinking water sources provides an incentive for business and industry to consider relocation to eastern Montana.
- Reduction in chemical usage and cost as a result of increased crop spraying efficiency.
- Rural area fire protection capacity
- Increased property values
- An alternative water sources for livestock.
- Safe and reliable household drinking water to improve the health and existence of the people.

The Dry-Redwater Regional Water Authority has been working with the Billings office of the Bureau of Reclamation to instill this water project as stipulated in the Rural Water Supply Act of 2006, and as expressed in the Interim Final Rules. However, the staff turnover within this regional office along with the various interpretations of the Interim Final Rules given by this office has significantly strung out this project's approval. Given the investment made in time and money – over \$4 Million dollars has been spent thus far (see attached timeline) and over ten years of work – we respectfully request the Committee to favorably report this bill and Congress to pass it into law so that the Dry-Redwater Regional Water System will be federally authorized. As it stands now, the system planning has reached a point beyond which it cannot easily move forward without the ability to work formally with the Bureau of Reclamation, the U.S. Fish and Wildlife Service, and other federal agencies.

In summary, the Dry-Redwater Regional Water System will provide a safe and dependable municipal and rural water supply for the public water supply systems and rural users that comprise the Dry-Redwater Regional Water Authority. Many positive long-term economic impacts will be realized by the agricultural, energy, tourism and recreational industries of the area; while the potential for good quality and quantity of water will allow businesses and housing to build and develop. Our primarily agricultural-based frontier communities in eastern Montana strongly support all components of this project as a good, clean, reliable source of water which is vital to our existence.

I would also like to add to my testimony that the Dry-Redwater Regional Water Authority fully supports S. 1365, the Authorized Rural Water Projects Completion Act, which was introduced by Senators Tester and Daines. This bill provides funding for authorized rural water projects and, as its language will include the Dry-Redwater Regional Water Authority System once it is authorized, provides a way to pay for our Water System. The Dry-Redwater Regional Water Authority is grateful for this inclusion in this funding bill written by the Montana Senators and respectfully urges the Subcommittee and Congress to pass this bill into law so that rural water projects can receive funds from the Reclamation Fund to finance western water development. The Bureau of Reclamation, in previous testimony before this Committee, has stated that "current and projected funding levels may not be sufficient to complete the federal funding portion of the authorized rural water systems." S. 1365 will assist the BOR and provide a continuous level of mandatory funding to support the construction of authorized rural water projects to deliver water to smaller, isolated communities like ours. The Reclamation Fund was established in 1902 by Congress to be used as a funding source to construct water projects in the West so we fully support this legislation that paves a pathway to actual construction of these authorized rural water systems.

Water Quality of a S Well Site Name	Depth	Sodium	Bicarbonate	Sulfate	Fluoride	TDS	
	County	-					
73 RANCH	Garfield	1003.00	1524.00	737.00	2464.00	2.80	4577.17
JORDON JOHN CLAUSON WILLIAM	Garfield	280.00	667.00	795.00	793.00	1.00	1885.00
	Garfield	300.00	502.00	812.00	391.00	1.00	1330.18
73 RANCH	Garfield	1003.00	1484.00	656.40	2346.00	<5.0	4362.31
GARFIELD CO SCHOOL DIST #15	Garfield	350.00	447.00	912.60	33.80	3.35	1048.79
BIG DRY SCHOOL HOUSE	Garfield	700.00	625.00	378.20	916.00	< 0.5	1788.81
MCKERLICK JOHN	Garfield	80.00	586.00	700.20	627.80	2.00	1603.38
BURGESS RANCH	Garfield	365.00	670.00	271.00	681.00	1.00	1806.43
BAKER JIM	Garfield	390.00	979.00	1052.00	1241.00	1.00	2780.48
HOVERSON SARAH	Garfield	370.00	1062.00	1247.00	1210.00	1.50	2996.94
HAFLA JOE	Garfield	258.00	544.00	886.00	657.00	0.10	1733.50
PLUHAR PHILLIP	Garfield	255.00	460.00	688.00	424.00	0.30	1259.24
KEEBLER DEAN	Garfield	600.00	592.00	618.00	748.00	1.40	1671.91
LANDERS H	Garfield	380.00	587.00	612.00	764.00	1.10	1688.92
CITY OF CIRCLE	McCone	1624.00	412.00	907.70	<25.0	4.31	1002.02
CITY OF CIRCLE-WELL #1	McCone	150.00	775.00	829.60	1059.00	2.55	2317.44
CITY OF CIRCLE	McCone	1508.00	400.00	921.00	<0.1	5.20	1004.81
CITY OF CIRCLE	McCone	1508.00	472.20	886.90	<2.5	5.10	1109.19
PRAIRIE ELK SCHOOL	McCone	200.00	1891.00	2596.00	2055.00	0.95	5303.20
DREYER RAY	McCone	189.00	820.00	824.20	1229.00	0.80	2537.42
WHITMUS FRANK	McCone	101.00	975.00	1110.00	1350.00	1.18	2964.94
WHITMUS FRANK	McCone	640.00	476.00	1085.00	3.40	5.50	1129.85
WHITMUS FRANK	McCone	640.00	473.00	1088.20	<25.0	5.96	1123.78
WHITMUS FRANK	McCone	640.00	456.00	1003.50	<2.5	6.67	1101.34
WHITMUS FRANK	McCone	101.00	426.00	1043.10	7.40	0.06	1049.21
WALLER G	McCone	240.00	520.00	1000.40	837.70	0.10	2044.70
MERRY HERSCHEL	McCone	260.00	700.00	683.20	887.80	2.70	1967.40
KJELGAARD HAROLD	McCone	220.00	1340.00	1964.00	1345.00	1.90	3701.16
FLATTEN CLINTON	McCone	175.00	736.00	1160.00	660.00	4.07	2033.71
WAGNER R	McCone	85.00	92.00	494.80	667.20	0.10	1405.10
ZAHN DONALD	McCone	20.20	230.00	378.60	1705.70	0.20	2630.97
ZAHN DONALD	McCone	49.90	532.50	784.70	2125.80	0.20	3604.34
UNKNOWN-19.4 MI SW WELDON	McCone	?	2300.00	295.00	3700.00	NR	8128.32
PAWLOWSKI W	McCone	37.40	193.00	448.40	522.20	0.40	1107.56
SEXTON WALLACE	McCone	75.00	1015.00	493.00	4830.00	1.12	7144.25
MUELLER ARNOLD	McCone	203.00	626.00	1251.00	205.00	5.20	1527.93
UNKNOWN-10 MI S PRAIRIE ELK	McCone	?	4400.00	488.00	5000.00	NR	13717.39
FILLWORTH R CIRCLE MT 20 MI	McCone	201.00	1127.50	1018.90	2016.60	0.60	3844.26
TWITCHELL JOHN	McCone	89.00	810.00	867.60	1319.50	NR	2675.14
	wiccone	69.00	010.00	007.00	1319.30		2075.14

Water Quality of a Small Sampling of Wells Currently Used in the Service Area

DREYER RAY	McCone	17.00	1116.00	915.00	3171.90	0.50	5320.63			
PAINE EDWARD	McCone	123.00	1230.00	1283.90	1659.50	1.00	3591.35			
HUSEBY D	McCone	20.00	445.00	878.40	673.00	0.30	1701.37			
PAWLOWSKI OTTO	McCone	276.00	574.00	932.50	1014.90	NR	2237.45			
JAMES MATTHEW	McCone	109.00	584.00	1191.20	344.00	1.00	1562.91			
SHEFFELBINE ORVILLE	McCone	307.00	977.00	982.00	1511.00	0.20	3188.91			
SHEFFELBINE ORVILLE	McCone	67.00	897.00	791.00	1528.00	0.55	2962.21			
GASS MILTON	McCone	268.00	1470.00	1713.00	1794.00	0.70	4178.61			
WRIGHT STEWART	McCone	365.00	954.00	1315.00	947.00	2.20	2619.10			
GIBBS DAVID	McCone	210.00	825.00	819.80	1068.20	2.30	2349.54			
HERZBERG JOHN	McCone	215.00	776.00	1290.00	624.00	1.10	2067.03			
NEFZGER DEAN	McCone	175.00	1083.00	1576.00	1245.00	2.00	3150.22			
GULDBERG	McCone	65.00	234.00	684.00	1610.00	2.10	2813.50			
Meets Standards										
Micels Standards										

Exceeds Standards

Source: Ground Water Information Center