

INTERIM WATER POLICY COMMITTEE TESTIMONY

Provided by Art Hayes, Jr., President

Tongue River Water Users' Association

January 14, 2010

Mr. Chairman and members of the committee, I thank you for the opportunity to speak today. I am Art Hayes Jr., President of the Tongue River Water Users' Association. I am also a fourth generation rancher on the Tongue River. My great grandfather recognized the need for irrigation when he filed the first water right out of the Tongue River. He also recognized the need for reliable sources of ground water.

There are two significant impacts to Montana's water resources as a result of coalbed methane development. The first is the impact on the water quality of the surface waters from disposal of polluted CBM water to Montana's surface waters—the Tongue and Powder Rivers and their tributaries, and the Tongue River Reservoir. The second issue is the depletion of Montana's precious groundwater resources which are essential to the health, safety and welfare of the people in water-scarce southeastern Montana. I will address the issue of water quality first.

The headwaters of the Tongue River start in the Big Horn Mountains of Wyoming and the river then flows north to the Yellowstone at Miles City Montana. I'd like to note here, the water coming from the Big Horn Mountains is just as pristine as the waters of the Flathead. As the river enters the plains it cuts through many of the coal aquifers that add to the base flow of the river and due to the geology of the area the river naturally becomes more saline as it flows toward its confluence with the Yellowstone in Miles City. This delicate natural balance is upset by the addition of coal bed methane water to the river and its tributaries.

The standards set for the Sodium Absorption Ratio and for Electrical Conductivity are not protective of the high clays soils at the lower reaches of the drainage. The U.S. Salinity Lab, in a study done by Donald Suarez, a well-known and respected PhD soil scientist, tested the soils from the T&Y Irrigation District and found an SAR of 2 will damage the soils. Yet the SAR standard for the river is 3. Based on current evidence, we have reason to believe that it only takes a one time

irrigating with high EC water to cause serious, and possibly irreversible damage to high clay soils, yet our standards are based on a monthly average.

The Department of Environmental Quality allows more methane water to be discharged in the non-irrigation season than in the irrigation season, yet all of the discharges are above the Tongue River Reservoir and are therefore stored in the reservoir during the non-irrigation season. In order to meet our contracts with our members who rely on high quality water for irrigation, and to fulfill the requirements of the Northern Cheyenne Water Compact, the Water Users' Association must store this highly polluted water in the non-irrigation season. If snowmelt is not adequate to dilute the stored water then the irrigator—who has already purchased the water—has only polluted water available to him. In the past two years, due to the late snow melt, the water at the beginning of the irrigation season was of such poor quality that some irrigators had to delay much needed irrigation. Why should a farmer have to take the risk of damaging a field with polluted water in order to allow the coalbed methane industry to dump its industrial waste into Montana's waters? Another way to express what is happening on the Tongue is: when you irrigate high quality land with poor quality water that land will become poor quality.

Sodium Bicarbonate, the main constituent of Coal Bed Methane water, it is not only harmful to soils, but it is deadly to aquatic life. Its effects on aquatic life, including macro-invertebrates in the Tongue River have been dramatic. Salt sensitive species have disappeared in the river below the dam, yet no one really knows the full extent of the damage because there was no baseline data gathered before coal bed methane discharges began, and past data gathered for coal mine EIS's, for graduate theses, or data gathered by Fish, Wildlife and Parks has never been reviewed or consulted.

At the time that the discharges started, the Colstrip High School advanced biology class was monitoring the river below the dam and the class documented the loss of aquatic life, but no one would believe them—after all they are just high school students. Last month in Sheridan, WY, at a workshop on the effects of bicarbonate on aquatic life, Fidelity's hired PhDs noted the lack of aquatic life below the dam. Fidelity has failed the Whole Effluent Toxicity (WET) Tests, over one hundred times. WET tests measure toxicity on aquatic life, and are required under the federal Clean Water Act regulations. Despite their inability to pass the WET tests, and attempts to change the species in order to pass the tests, they are still allowed to continue discharging. After researching the effects of sodium

bicarbonates on aquatic life and reading some of the peer reviewed papers, it is apparent that the higher EC that we now have had for a long period of time in the winter is killing our river, the species that depend on it, and the soils to which it is applied.

The water from the coal aquifers may not be the best quality but my ranch and many of my neighbors are almost totally dependent on these aquifers for our stock and domestic use. The priority date on these wells date back to the 1930's and 1940's. The state courts have upheld this time-honored rule in water law "First in time first in right," and we can accept nothing less from the legislature. Legislation like last session's HB 575 would have turned water law into "Last in time, first in right," a complete overturning of the prior appropriation doctrine. I have no problem with some of the coalbed methane discharge water being put to beneficial use under a temporary permit, as long as it does not affect an existing water right, and as long as it is an actual, recognized beneficial use. If a farmer or rancher wants to irrigate with this water it should be treated and used wisely at rates that the crop requires or in amounts needed for cattle, according to standard methods required to prove up a water right. If Fidelity can treat the water to discharge it to the river, Fidelity should be required to treat it for irrigation. Managed irrigation using soil amendments in order to counter the effects of the high sodium water is nothing but deceptive water disposal.

Montana water law is time tested going back to territorial time. If left alone, it works. Our state constitution recognizes and protects vested groundwater rights. The legislature and the State should be upholding the constitution not supporting changes to water law for every special interest that comes along.

On July 14th 2008, Judge Jones (in Diamond Cross et al. vs. DEQ et al.) ruled that "Disposal of CBM ground water in a manner without any recognized benefit from the water does not pass constitutional muster." In that same decision, the Court admonished DNRC to work with the Board of Oil and Gas Conservation to ensure that water is not being wasted and is put to recognized beneficial uses. Yet over a year after that court ruling water is still being evaporated and wasted—some of which is taking place on state school trust land. This water resource is vital to the people in southeastern Montana. It is essential to their health, safety and welfare. The water is prehistoric in age with very little recharge. The Powder River Basin Controlled Groundwater Area Final Order contains an excellent discussion of the importance and scarcity of groundwater in the Powder River Basin. Water coming from the coal aquifers feeds hundreds of springs, adds to

the base flows of the rivers and tributaries, and it has served the people living here for thousands of years. These Coal Aquifers will have to serve Montana for generations to come, as there is not enough surface water or ground water to replace it.

In conclusion, the Legislature needs to work toward a solution to protect Montana's precious water resources—both ground and surface waters—and allow true beneficial use of the water in a way that will protect those with senior water rights.