

## POWDER RIVER BASIN RESOURCE COUNCIL STATEMENT – BOB LeRESCHÉ

WE IN WYOMING HAVE ALREADY SUFFERED 12-14 YEARS OF WATCHING OUR WATER DISAPPEAR INTO THE MAW OF THE ENERGY INDUSTRY, BUT WE'RE AFRAID THAT WHAT'S COMING NEXT WILL BE EVEN WORSE.

OUR COALBED METHANE INDUSTRY (CBM) DRILLED OVER 26,000 WELLS IN THE LAST DECADE, MOSTLY IN THE POWDER RIVER BASIN IN NORTHERN WYOMING. TODAY, MANY HAVE BEEN ABANDONED, AND ONLY A FEW ARE PRODUCING, MOSTLY BECAUSE OF THE PLUNGE IN THE VALUE OF METHANE IN THE US.

THE WATER DISASTER THAT FOLLOWED CBM WAS A BIT DIFFERENT THAN THAT WHICH WILL ACCOMPANY DEEP HORIZONTAL DRILLING AND FRACKING. CBM OCCURS IN SHALLOW STRUCTURES (1,000' – 3,000') WHICH HOLD COAL AND WATER. TO RELEASE THE GAS, AQUIFERS MUST BE DE-WATERED AND THE WATER SOMEHOW DISPOSED OF. IN 1992, THE WYOMING STATE ENGINEER – OUR STATE'S WATER CZAR – ISSUED A DETERMINATION THAT PUMPING OUT AND DISCARDING FRESH WATER TO FACILITATE CBM PRODUCTION WAS A "BENEFICIAL USE" OF THE GROUNDWATER UNDER WYOMING WATER LAW. FROM THAT POINT ON, HE PERMITTED PUMPING UNLIMITED QUANTITIES OF GROUNDWATER FOR THIS PURPOSE.

FROM 1997 THROUGH 2012, A MINIMUM OF 309 BILLION GALLONS OF WATER WAS PUMPED OUT – MOSTLY ONTO THE GROUND, AND ONLY SOME TREATED. VERY LITTLE WAS RE-INJECTED, AND MUCH OF IT THAT WAS DUMPED DESTROYED PASTURES, CROPLANDS AND AGRICULTURAL SOILS AND DISRUPTED RANCHING OPERATIONS.

CBM WELLS (ALMOST ALL VERTICAL BORES) WERE COMMONLY FRACKED, BUT EACH FRACK JOB CONSUMED "ONLY" 150,000 – 350,000 GALLONS, COMPARED TO THE 3 – 6 MILLION GALLONS PER FRACK DEMANDED BY DEEP HORIZONTAL WELLS.

NEVERTHELESS, THIS MANIC DISCARDING OF WATER OVER ONLY A DECADE HAS ALREADY COMPROMISED SOME HUMAN USES. THE NORTHEASTERN WYOMING CITY OF GILLETTE SAW ITS PRIMARY WATER SOURCE (THE FORT UNION AQUIFER) DROP BY UP TO 625 FEET IN ONLY 10 YEARS. THE SHALLOWER WASATCH AQUIFER WAS MINED DOWN MORE THAN 250 FEET. PRECIPITATION RECHARGE OF THESE RESERVOIRS IS APPROXIMATELY 0.15 INCHES A YEAR. SIMPLE MATH TELLS US IT WILL BE 50,000 YEARS BEFORE THE FT. UNION IS BACK UP TO WHERE IT WAS IN 1997.

BUT THINGS CAN GET WORSE, AND THEY ARE.

300 DEEP HORIZONTAL WELLS HAVE ALREADY BEEN DRILLED IN THE PR BASIN SINCE 2010, AND 1,000 MORE ARE ALREADY PERMITTED. BLM ESTIMATES AT LEAST 3,800 WILL BE DRILLED IN CAMPBELL AND JOHNSON COUNTIES BEFORE 2022, WITH TENS OF THOUSANDS MORE TO FOLLOW AROUND THE STATE. EACH OF THESE WILL LIKELY BE FRACKED SEVERAL TIMES, AND CONSUME, POLLUTE AND REMOVE AN AVERAGE OF 4 MILLION GALLONS OF FRESH WATER FROM THE HYDROLOGIC CYCLE.

AND WE DON'T EVEN KNOW HOW MUCH WATER WE HAVE TO MEET THIS DEMAND.

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RECENTLY OUR ORGANIZATION PRESENTED A REPORT TO THE GOVERNOR AND HIS TOP EXECUTIVES AND AIDES, AND PROVIDED IT TO THE LEGISLATURE. THE REPORT SUMMARIZES A SEVEN-POINT PLAN WE BELIEVE THEY MUST FOLLOW TO PREVENT A WYOMING DISASTER IN WATER DEPLETION. THE SEVEN PROBLEMS DEFINED ARE:

1. INADEQUATE KNOWLEDGE OF AQUIFER WATER LEVELS AND WATER REQUIREMENTS FOR OIL AND GAS DRILLING AND HYDRAULIC FRACTURING.
2. INADEQUATE USE OF “GROUNDWATER CONTROL AREAS” (A REGULATORY TOOL THAT PRIORITIZES USES WHEN INADEQUATE WATER IS AVAILABLE).
3. MANAGEMENT AND DISPOSAL OF CONTAMINATED FRACKING FLOWBACK WATER AND PRODUCED WATER NEEDS BETTER TRACKING AND PLANNING FOR DISPOSAL AND MAYBE SALVAGE.
4. POOR PERMITTING AND INSPECTION OF DEEP INJECTION WELL DISPOSAL OF CONTAMINATED WATER THREATENS POTABLE AQUIFERS.
5. UNPLUGGED OR IMPROPERLY PLUGGED OIL, GAS, URANIUM OR EXPLORATORY BORE HOLES PROVIDE CONDUITS FOR POTABLE AQUIFER CONTAMINATION.
6. COMMERCIAL OIL FIELD WASTE DISPOSAL FACILITIES POSE RISKS TO GROUNDWATER, LAND AND WILDLIFE; AND,
7. RESEARCH IS URGENTLY NEEDED TO DEVELOP NEW METHODS FOR WATER REUSE AND RECYCLING.

THE REPORT PROVIDES BACKGROUND AND SUGGESTS SPECIFIC SOLUTIONS TO EACH OF THESE PROBLEMS.

YOU CAN FIND THIS REPORT, “*A SEVEN POINT PLAN TO PROTECT GROUNDWATER – UNCONVENTIONAL OIL & GAS DEVELOPMENT REQUIRES WYOMING STATE ACTION,*” AT [WWW.POWDERRIVERBASIN.ORG](http://WWW.POWDERRIVERBASIN.ORG).