I am Peggy Rawlins with CCA & WCC with a few thoughts on ~~improving~~ changing part of the coal industry. Both CBM & the associated water are resources which need to be used for economic reasons. These resources are too valuable to waste.

Water produced by CBM development can become a highly valued ~~co~~ product but instead it has been regarded as a disposal obstacle to gas production. This is changing as some gas co- are selling their methane. Where there's coal there is CBM. The pressure of ground water often keeps the methane in place. When a CBM well is drilled both water & gas come up. Some sources of methane are of course coal mines, waste water treatment plants & dairies. Figures for CBM wells in the Powder River Basin of Wyoming can produce 15 gallons a minute of water & 125 cubic feet a day of methane. Some produced water can be reinjected to open cracks in coal seams & the methane will go to the bottom of the well. ~~Acceptable water can be reinjected to open cracks in coal seams~~

Acceptable water quality can be piped to ~~stock~~ tanks for stock or ponds & used for electric power. Of course Coal co. would need the permit ~~[illegible]~~ to do so.

Fuel cells have been around since 1930's. They generate electric power & water on space craft - large fuel cells now use methane. In terms of CBM development, a fuel cell unit with 250 KWh generating capacity would require 2.5 wells worth of CBM production. The heat can distill about 690 gallons an hour with a high temperature evaporator. Pure water produced can be marketed or mixed for discharge.

Combining CBM, fuel cell & water desalination can be an economic opportunity for coal producers - the future can be different. ~~as coal mines close~~ -