

Rosebud Conservation District's Land Use Ordinance #1 Concerning Coal Bed Methane Produced Water

Providing protection and conservation for Rosebud Conservation District's soil and water while producing Coal Bed Methane for the nation

The demand for this clean burning fuel has made it affordable to produce in our State.

CBM production produces a large quantity of water as a by-product. Some of this water is low quality water (high sodium and salts) depending upon where it is produced. CBM operators dispose of this water in several ways:

- **Beneficial Uses.** Livestock watering, domestic uses, irrigation, wildlife, industrial uses
- **Injection.** This consists of finding geological structures which can handle the CBM water and pumping it back into the ground.
- **Discharge to state waters.** This consists of installing facilities that put the produced CBM water into our state waters if it falls into the guidelines set by the Department of Environmental Quality.
- **Evaporation.** This consists of building facilities that allow or cause for the rapid evaporation of the CBM produced water such as impoundments, water misters, or land application of water which can include irrigation of crops.

Because of the large draw down of the District's aquifers and the damage that can happen to the District's soil when it comes into contact with CBM produced water a Land Use Ordinance is proposed that requires a Conservation Plan that provides these items:

- **Reclamation Bond for CBM impoundments.** This is to insure that there are funds available to clean up these pond sites after the CBM play is over in the event that an Operator can't do it. This also relieves the taxpayer from this burden in the future
- **Beneficial use of produced water.** The language in the ordinance provides that produced water must have a beneficial use permit from the state.
- **No accumulation of sodium salts or soluble salts are allowed in the District's soil.** This is controlled by requiring lined impoundments and closely monitoring irrigation that uses CBM water.
- **Provides for surface owner consent for location** of impoundments and fields that will be irrigated with CBM water. This allows for the historical uses of the land to be used as a guide to the location of facilities.