Barnes County Water Resource District PO Box 306 Valley City, ND. 58072 701-845-8508

07/20/2010 Special Clausen Springs Meeting Emergency Spillway Repair <u>Minutes</u>

Present: Chairman McMillan, Pat Hurley and Don Johnson Also Present: Mike Opat and Chad Engels, Moore Engineering. Commissioner's Opdahl, Froelich, and Berntson., Jon Kelsch NDSWC, Senator Larry Robinson, North Dakota Game & Fish Personnel, Citizens' of Kathryn.

Meeting called to order by Chairman, Jeff McMillan at 10:00 AM.

Chairman McMillan asked Chad Engels of Moore Engineering to present the preliminary design and feasibility findings.

Engels gave a brief synopsis of the events of the 2009 flood and preliminary studies. He also explained the 2010 reinforcement project that took place in April along with the geo-tech work that was completed. Engels noted that the findings of the geo-tech studies showed that there were concerns with ground stability, should a concrete structure be placed on the face of the dam. He also noted that the Dam is stable, but that the State Water Commission recommends that the dam be monitored yearly.

Costs associated with building the Emergency spillway to the specifications of a Class 5 Dam were discussed. Engels noted that concrete would need to be 4 feet deep for a structure on the embankment of the dam to secure insure that the concrete structure itself would remain stable. Because of this thickness, the final cost of the dam is expected to range from 5.9 million to 6.7 million dollars.

Jon Kelsch of the State Water Commission stated that Acting State Engineer Todd Sando, is open to a request for a dam design reduction based on the results of the Incremental Risk report that was completed in the fall of 2009. Kelsh also noted that Sando may be willing to approve the use of articulating concrete on the spillway as well. State Senator Larry Robinson voiced concern over the timeliness of a response on the reconsideration.

Kelsch stated that a specific design concept would have to be formally submitted to Mr. Sando. Board member, Pat Hurley moved to request the State Engineer to reconsider lowering the design standard to a .3 PMP event and to request the use of an articulating concrete slab. Board member, Don Johnson seconded the motion. The motion carried. Moore Engineering will complete a proposal and to assistance the District with submitting the request to the State Water Commission.

Being no further business, Hurley moved to adjourn. Johnson seconded the motion.

Adjourned

Respectfully submitted

Jamie Smith, Secretary