Presentation to the North Dakota Legislative Council Natural Resources Committee Bismarck, North Dakota

By William Schuh Water Appropriation Division North Dakota State Water Commission

March 7, 2008

Mr. Chairman and members of the Natural Resources Committee. I am William Schuh, hydrologist with the State Water Commission's Water Appropriation Division.

Section 11 of Senate Bill 2020, the State Water Commission's appropriation bill, directed the Commission to study, develop, and recommend policies for assessing the impact of tile drainage on the beneficial use of water by prior water appropriators. The legislation directed that the report be completed by July 1, 2008. This is a brief update to this directive.

Given the time constraints of a one-year study resolution, the assessment could not commission or undertake field research. It, therefore, has depended on existing information from public, university and private sources, the evaluation of potential impacts based on those sources, and the application of sound principles of hydrology and their interpretation.

The first draft of the directed study should be complete within the next three weeks. We will then forward it to several parties for technical review, including in-house staff, university and/or extension personnel familiar with tile drainage, and selected parties in the drainage industry. We intend to deliver the final report to the Legislative Council by the assigned date of July 1, 2008.

I would prefer to defer comment in detail on the results until the materials have been reviewed. In general, approximately 20 percent of the land in eastern North Dakota overlies glacial aquifers which limits potential impacts of tile drainage. Also, preliminary indications are that potential adverse impacts of subsurface drains on glacial aquifers or other well fields appear to be minor and situational. Recommendations for regulatory consideration must await review, but we anticipate that proposals for changes in the North Dakota Century Code or the North Dakota Administrative Rules will, if necessary, be minor.