Testimony State Board of Agricultural Research and Education December 4, 2019 North Dakota Department of Environmental Quality

Good morning Chairman Birdsall and members of the State Board of Agricultural Research and Education. My name is Karl Rockeman, and I am the Director of the Division of Water Quality within the North Dakota Department of Environmental Quality. The Division of Water Quality protects and monitors the state's water resources to ensure the quality of surface and groundwater for the public's use. Today, while not here to support any specific project or proposal, I would like to identify three areas where further research would be valuable.

First, additional research should be conducted to assess the effects of conservation practices on water quality. What happens on the land impacts the water. Producers need North Dakota-specific information so they can make management decisions on practices such as cover crops or subsurface drainage, and carefully consider the economic and environmental costs/benefits..

Second, areas in western North Dakota continue to be impacted by spills of saltwater brine, which is a byproduct of oil production. Both the landowners and those responsible for the spills have a vested interest in seeing those spills remediated as soon as possible. More research is needed on new ways to achieve the goal of returning soils back to their original condition.

Finally, the need to research and promote practices to improve soil health is as great as ever. NDSU researchers have shown that we continue to lose topsoil at an alarming rate. A sustained effort of research and education is needed to change the path we are on, or our most valuable agricultural asset and the economic activity it generates may be irreparably harmed.

Thank you for allowing me the opportunity to highlight these important issues. I hope that you'll consider them as you review the various proposals before you. This concludes my testimony, and I would be happy to answer any questions you may have.