NEWS RELEASE

North Dakota State Water Commission
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State Water Commission to Conduct Airborne Electromagnetic Survey over parts of Benson, Ramsey, Eddy, Nelson, LaMoure, Dickey and Sargent Counties

The North Dakota State Water Commission is planning to conduct an aerial electromagnetic survey (AEM) of aquifers in parts of several counties. The survey is scheduled to begin the week of October 15th and involves a helicopter towing a large hoop-shaped antenna about 100 feet above the ground that sends and receives electromagnetic signals to characterize geology beneath the land surface.

The results of the survey will provide imagery and characteristics of the subsurface materials that can aid in the mapping of the buried glacial aquifer deposits that contain major groundwater supplies.

“The AEM method is becoming an important tool in groundwater investigations. Combined with conventional methods of test drilling and borehole geophysics, it has greatly improved the ability and efficiency of buried aquifer characterization,” said Jon Patch, Director of Water Appropriations for the State Water Commission (SWC). “Massive amounts of data collection can be done in a matter of days, that with conventional methods (test drilling), would take years. The SWC used this technology in central North Dakota on the Spiritwood Aquifer near Jamestown and in the southern Red River Valley with positive results.”

The flight survey will include about 3,000 flight kilometers flown in a grid pattern with primarily east-west trending flight lines spaced 500 to 2,000 meters apart. Two separate blocks will be flown. The first being a 100 sq. mile area extending from west and north of Tolna, to the east end of Devils Lake. The second being a 600 sq. mile area from near Montpelier, south and east to the South Dakota state line. The project is expected to take about four weeks to complete. “We want the public and residents living near the area to be informed about the survey. We hope to wrap up field data collection before the end of November, weather permitting,” said Patch.

The primary contractor performing the work is Geotech Airborne, Aurora Ontario Canada. The helicopter will be manned by experienced pilots who are specially trained for low-level flying with this equipment, and all operations will be conducted within Federal Aviation Administration regulations.

Please follow the link for a map, flight video, and more information: http://swc.nd.gov/AEM/