



Helicopter to make low-level flights over northern Knox, Cedar, and Dixon counties

HARTINGTON — Beginning in July, a helicopter with instruments mounted below, will collect and record geologic measurements to learn more about buried sand and gravel aquifers. The Lewis and Clark Natural Resources District has planned the flights with funding from the Nebraska Department of Natural Resources through a Water Sustainability Fund grant awarded to the district.

According to Katie Cameron, coordinator of Eastern Nebraska Water Resource Assessment, the flights will improve our understanding of the available ground water resource and potential ground water/surface water connections in an area of the state made more complex by the presence of glacial deposits.

Aqua-Geo Frameworks LLC will oversee the flights, process the data and information, and produce a final report. "This technology allows for fast data acquisition, upwards of 50 miles per hour, with exploration depth down to 400 feet below the land surface from the air."

The helicopter will fly lines spaced approximately three miles apart over northern Knox, Cedar, and Dixon counties. More densely spaced flight lines are planned in some areas in order to better define aquifers of interest to the district.

Scientific equipment is towed about 100 feet below the helicopter in a 'spider web' array and



is designed to map geologic structures beneath the earth. The helicopter will be manned by experienced pilots who are specially trained for low-level flying with this equipment.

This scientific program is designed to study the area's water resources such as sand and gravel aquifers using an aerial perspective. It is part of an ongoing program to identify physical occurrences such as changes in geologic materials and sediment types. If you would like to learn more about the planned flights information is available on the ENWRA website at www.enwra.org under the "2018 AEM" tab. Past flights information is available on the ENWRA website under the "2016 AEM" tab.