

WATER TOPICS OVERVIEW COMMITTEE - WARD COUNTY FLOODPLAIN MAPPING STUDY

North Dakota Century Code Section 54-35-02.7 directs the Legislative Management during each interim to appoint a Water Topics Overview Committee in the same manner as the Legislative Management appoints other interim committees, and to designate a chairman. The committee must meet quarterly and is to operate according to the statutes and procedure governing the operation of other Legislative Management interim committees. Section 54-35-02.7 also sets out the committee's responsibilities, including the responsibility of providing legislative overview of water topics and related matters, the Garrison Diversion Project, and for any necessary discussions with adjacent states on water topics. In addition, the committee is required to work collaboratively with the State Water Commission and may hold meetings with the commission.

STUDY BACKGROUND

In addition to the responsibilities in Section 54-35-02.7, for the 2017-18 interim the Legislative Management assigned the committee two studies from 2017 House Bill No. 1020. Section 14 of the bill ([appendix](#)) requires the committee to monitor and obtain reports from the State Engineer regarding a flood hazard risk management study. Specifically, under Section 14, the State Engineer must "perform a study and proof of concept demonstration to implement statewide flood risk management capabilities for assessing, managing, and reducing property-specific flood risk." The State Engineer must report to the committee upon request and at the conclusion of the study. Section 14 also directs the State Engineer to work with the North Carolina floodplain mapping program and Ward County to conduct the study and proof of concept demonstration. The legislation also provides specific instructions regarding what to include in the study and demonstration, what steps must be taken to complete the project, and what the final report to Legislative Management must entail. Section 13 of the bill allocates \$30,000 for the purpose of conducting the flood hazard risk management framework study and demonstration. That section also provides any fees collected from data users and partners and any other funds from public or private sources, including federal grants and county revenue contributions, are appropriated to the State Engineer for the study and for expanding the project to additional counties.

According to the testimony in support of the study, this study arose, in part, from concerns regarding floodplain mapping and the cost of flood insurance after the Mouse River flood in 2011. Residents of Minot and surrounding communities in Ward County are required to obtain flood insurance if their homes are located in the Mouse River floodplain, and their location in the floodplain helps dictate the rate they pay for that insurance. This is true for residents in other floodplains as well. However, if the owner of a structure within a floodplain obtains an engineer's certification showing the property is above the relevant flood elevation, the owner will not need to obtain flood insurance. North Carolina has developed sufficient data on structures within floodplains to allow its residents to use the state data in lieu of hiring engineers to prepare certifications to alleviate the need for flood insurance.

The purpose of this study is to evaluate whether North Dakota has or can obtain similar flood risk data for residents to use to exempt structures from flood insurance requirements. The necessary flood risk data consists largely of light detection and ranging (LiDAR) data and geographic information system (GIS) data. Light detection and ranging is a laser system used to acquire x, y, and z coordinates of terrain as well as natural and manmade terrain features, and essentially uses lasers to measure elevations. The geographic information system is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data. Ward County has both types of data, and a central question for this study is whether the data meet necessary federal flood insurance exemption requirements.

RELEVANT FEDERAL LAWS AND PROGRAMS

The National Flood Insurance Act of 1968 mandated floodplain mapping as part of the National Flood Insurance Program. Under that Act, residents of communities that satisfied certain floodplain management requirements could obtain flood insurance through the program. Five years later, the Flood Disaster Protection Act of 1973 required owners to obtain flood insurance for certain structures within floodplains as a condition of receiving federal or federally related financing. Congress made additional reforms to the flood insurance program after several costly storms in the 1990s. For example, the National Flood Insurance Reform Act of 1994 required communities to review and, if necessary, update floodplain maps every 5 years. The Federal Emergency Management Agency (FEMA) developed a plan to upgrade its floodplain mapping in 1997 and set out parameters that its floodplain maps must meet. The Federal Emergency Management Agency will accept certain data to exempt a structure within a floodplain from the requirement to obtain flood insurance.

OTHER STATES' PROGRAMS

North Carolina is considered a leader in floodplain mapping and provides digital flood hazard data, models, maps, and risk assessments developed from data obtained, in part, from LiDAR and GIS. Much of the data is available to the public online. The Federal Emergency Management Agency accepts North Carolina's publicly available data as proof a structure within a floodplain is above flood levels and does not require flood insurance. The study language directs the State Engineer to work with the North Carolina floodplain mapping program.

POSSIBLE STUDY APPROACH

The committee is not directed to carry out the study. However, the committee has a role in overseeing and receiving reports on the study from the State Engineer. The committee may request reports at its quarterly meetings. One of the first issues to address is whether FEMA-acceptable LiDAR and GIS data already exist for owners of structures in the floodplain in Ward County. If the data is not available, the committee may request a work plan for the study from the State Engineer.

ATTACH:1