**AURORA COUNTY COMMISSIONER PROCEEDINGS**

**April 11, 2023**

 The Commissioners held a special meeting regarding the findings and proposed remedies of the Skunk Creek Basin Hydrology Study. Chairman Clyde Dethlefsen called the meeting to order with Randy Niles, Travis Clark, Roger Hanten, and John Paul Studeny present.

 The Pledge of Allegiance was recited.

 Emergency Manager welcomed everyone in attendance and turned the meeting over to Michael Gutenkauf from IMEG to present the findings and proposed solutions from the study.

 Gutenkauf told the group that Horseshoe and Crystal Lakes contributed to the flooding in 2019. The overall contributing drainage basin for Skunk Creek is 69 square miles at I-90 and US Hwy 281. The drainage flows through Skunk Creek and several culverts eventually reaching Firesteel Creek. Previous studies described the drainage area at I-90 as 8 square miles. The recent study included the area from 259th Street to 247th Street.

 Gutenkauf said the flow from a typical 6-inch rain flows from South of I-90, under Plankinton Main St, then under Hwy 16, through the railroad tracks up through US Hwy 281. In 2019 the water ponded on the south side of the railroad tracks. The main factor was the size of the structure opening, which restricted the flow at the railroad.

 Gutenkauf recommended either retro fitting the 7 ft culvert or replacing the current structure under the railroad tracks with a 10x6 ft box culvert. This would lower the elevation south of the tracks by 5 ft. Both proposed options would reduce some of the flooding in Plankinton by the railroad tracks. The increase in flow downstream is relatively insignificant. In the main channel, the peak flow increases 1% downstream of US 281. In the overflow over 252nd Street, the increased flow is about 12% which will be dispersed between several culvert crossings within the next mile along US 281, likely increasing ponding depths very slightly in this area.

 Gutenkauf stated that there are more pronounced drainage vessels in the area north of Plankinton than there is by Horseshoe and Crystal Lakes. In the area by the lakes, there is more ponding and depression areas than actual drainage lines.

 Gutenkauf noted there are 5 drainage crossings along US 281 and there may be more ponding on the west side of US 281, but it will eventually drain into one of the 5 drainage crossings.

 It was noted that when applying for FEMA grants, the damages to houses/structures are more of a priority than roads. If we can get a couple of houses moved out of the flood plain with this mitigation plan, the county’s chances of getting funding will be higher. With the couple of houses in Plankinton that were damaged by the floodwater and all the flooding down south, Emergency Manager Kehn stated that District III is very optimistic about getting the federal funds to do this project. The damages will help go toward the cost benefit ratio. Commissioner Studeny noted that in the early 90’s a study was done on the culverts under Campbell Street in Plankinton and it just never met the cost benefit ratio. Emergency Manager Kehn stated by increasing the size of the study from 8 square miles to 69, there is a better chance to meet it. Gutenkauf stated the pipe size on Campbell Street is small and could be bigger, but it is not really where the problem is.

 Residents from the Stickney area noted there were farms that were waterlocked due to the flooding and asked if there was anything done in the study to help with that problem. Gutenkauf said he knows there was a lot of flooding caused by the Lakes and there were numerous county and township roads that were flooded. Members of the group also wanted to know if the impact of the flooding on agricultural land accounted for anything. It was stated if somehow there was a way to control what comes out of the Lakes, such as a gate or something, that would help tremendously. Emergency Manager Kehn informed the group there is no mitigation or funding for ag land. It was also mentioned that no emergency vehicles were able to get through because of the flooded roads down south. The main road was under water by 4 or 5 feet and just came out from being under this year. This type of flooding will continue to happen unless something is done to control the water coming out of the Lakes. Rocky VonEye said she contacted SDATAT to see what Hopper township could do. She was told they could apply for an H&H Study for the township, but it has to be done through the county. Gutenkauf stated that FEMA will only help pay for a study if there is a disaster, otherwise, yes you can go ahead and do one, but the township will have to pay for it themselves. Dave Artz stated a 9–11-foot dyke was put in by the federal government to hold the water back in the lake in section 7 of Pleasant Lake Township. There was never a problem until the early 60’s said Artz. The commission was asked why study didn’t start at the source, which is Horseshoe and Crystal Lakes, and why it wasn’t done further south and further north. Commissioner Studeny answered by saying the most effective cost benefit ratio is in the Plankinton area and we looked at our best option to get funding. John Miller asked where the rural areas could get help for the agricultural side of things. Commissioner Studeny referred him to the NRCS office as they have helped in the past. Emergency Manager reiterated that FEMA looks at impacts done by the flooding and agricultural land is not included. Bonny Prien said there were 4 farms that were waterlocked due to the flood and no one cares about that, only the two houses in town. Emergency Manager Kehn said the impact is considered if the water actually touches the house or if it is flooded inside. There are a lot of things that tie our hands and we are working within the constraints that we are in with FEMA, said Kehn.

 Emergency Manager Kehn noted that this is the first step to mitigate the problems that occurred in 2019. The reason for the meeting was to make sure everyone is aware of what the study showed and what our options are. We have to start somewhere, said Kehn. Hopefully it will be something we can build off and possibly mitigate some of the problems further south and north in the future. After today, we will see what our cost benefit analysis shows and proceed from there.

 Emergency Manager Skyler Kehn thanked everyone for coming.

 Meeting adjourned subject to call.

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 Clyde Dethlefsen, Chairman

 Aurora County Commission

Attest: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Susan Urban, Auditor

Published once at the total approximate cost of \_\_\_\_\_\_\_\_\_\_.