

MINUTES OF SPECIAL MEETING
CASS COUNTY JOINT WATER RESOURCE DISTRICT
CASS COUNTY HIGHWAY DEPARTMENT
WEST FARGO, NORTH DAKOTA
NOVEMBER 17, 2016

The Cass County Joint Water Resource District met on November 17, 2016, at 9:30 a.m. at the Cass County Highway Department, West Fargo, North Dakota.

Present were Jurgen Suhr, Maple River Water Resource District; Shaun Olauson, Barnes County Water Resource District; Michelle Anderson, Administrative Assistant; Mike Opat and Josh Hassell, Engineers for the Board; Pat Downs, Moore Engineering, Inc.; Tom Soucy, Cass County Highway Department; Mike Hargiss, North Dakota Department of Health; Randy Gjestvang, Red River Retention Authority and State Water Commission; Bruce Kreft, North Dakota Game and Fish Department; Eric Dahl, Cass County Soil Conservation District; and those whose names appear on the attached roster.

Upper Maple River Watershed Project Team Planning Meeting

Pat Downs welcomed the Upper Maple River Watershed Project Team (Team) and introductions were made.

The Team reviewed the draft *Purpose and Need Statement*, goals and objectives for planning outcomes, the Alternatives formulated at previous meetings, data used to narrow the Alternatives from the *Alternative Screening Worksheet*, and the priority problem areas within the watershed identified for potential flood damage reduction solutions.

The purpose and goal of the Team meeting is to choose the level or target of protection and narrow down final Alternatives to meet the purpose and need for a detailed study to find potential solutions for flood damage reduction in the Upper Maple River Watershed. Mr. Downs reviewed the areas of concern identified by the Team. He explained each part of the process requires written reasons and criteria for keeping or removing a conceptual project site.

Josh Hassell provided information on the HED-HMS, 2D-HECRAS modeling results for 10-year, 25-year, 50-year and 100-year, and 24-hour preliminary inundation maps using historical data from 2009-2011 based on depths of .5 inches or greater in the Upper Maple River Watershed. A preliminary 2D HECRAS map was presented demonstrating a 10-year 24-hour event compared to a 100-year 24-hour event and the results at the priority damage areas. The Team determined the level or target of protection for watershed projects in the Upper Maple River Watershed to be a 10-year 24-hour event, which produces and average rainfall of 3.44 inches and an average basin runoff of 1.14 inches.

A summary of remaining Alternatives was presented and discussed. The Team reviewed the *Evaluation Summary Worksheet* and analyzed the data to narrow down final concepts and Alternatives for flood damage reduction in the Upper Maple River Watershed. The Team reviewed impoundment/dry dams and channelization. Grassland restoration and best management practices (BMPs) were discussed as tools to use in conjunction with primary Alternatives. Josh Hassel provided data on impoundments. Comparisons were made between the acres impacted to the volume inundation acres at the spillway. Mr. Downs stated location and property ownership were not considered.

Discussion was held on the number of structures necessary to achieve the goals for the Upper Maple River Watershed, peak water flows at Drain #46 and the outlet, the Upper Maple River Dam, flowage easements and right of way options available to landowners, Goose Lake storage capacity and the impacts of water from the Minnie Lake tributaries.

The Team agreed to move forward with Alternative #11-#12 and Alternative #5 in combination with another potential solution. The Team also adopted a general goal for the Upper Maple River Watershed to incorporate wetland restoration/creation and cropland BMPs in conjunction with the Alternatives.

Pat Downs reviewed the next step in the planning process. The Team agreed to meet with the Cass County Joint Water Resource District to provide an update and discuss the next step in the process.

Adjournment

There being no further business to be considered by the Board, the meeting adjourned without objection.

APPROVED:

Mark Brodshaug
Chairman

ATTEST:

Carol Harbeke Lewis
Secretary-Treasurer