On behalf of the Lower Minnesota River East Watershed Partnership, we would like to take this opportunity to express our support in Projects and Programs as well as Legislative Initiatives and Policy Changes that create financial opportunities and resources that address existing and future flooding issues and solutions within the Lower Minnesota River Watershed and throughout the State of Minnesota.

While the Lower Minnesota River East Watershed Partnership is a new entity, the partners within the watershed have worked for many years in addressing altered hydrology and flooding issues. Altered hydrology is considered a non-pollutant stressor and has a strong prevalence in the watershed. This stressor causes flashy flows and volumes (high and low) within a stream system which negatively impacts aquatic life, increases pollutant loading of numerous pollutants (especially sediment), and causes near/in-channel erosion. The frequency and intensity of altered hydrology and flooding is a result of changes in weather patterns and land use activities such as cropping rotations, drainage, and impervious surfaces (Minnesota Pollution Control Agency. (2020). Lower Minnesota River Watershed Restoration and Protection Strategy Report). The annual average rainfall within the Lower Minnesota River Watershed from 1895-2018 has seen an increase in roughly 2.5-3.5 inches. Additionally, the intensity of these precipitation events has worsened with larger rainfall events occurring more frequently (Board of Water and Soil Resources. (2019). Climate Change Trends and Action Plan). Due to an increase in frequency and intensity of precipitation, the water volume and flow rats have also increased over the decades (Jennings, Carrie. (2016). Why so much sand in the Lower Minnesota River? Open Rivers Journal.). Significant losses in organic matter, altering the function and shape of the watercourses in the watershed (approximately 62.3%), crop rotations, and an increase in impervious surface greater than 4% have contributed to altered hydrology and flooding issues within the Lower Minnesota River Watershed (Minnesota Pollution Control Agency. (2020). Lower Minnesota River Watershed Restoration and Protection Strategy Report). There are numerous tools in the toolbox that provide some kind of storage on the landscape as well as reduce water flow rates and volumes. Projects and practices including but not limited to wetland restorations, cover crops, reduced tillage, perennial vegetation, water and sediment control basins, grassed waterways, ravine and streambank stabilization, multipurpose drainage management, and stormwater basins have provide storage benefits and water quality benefits. While there are multiple practices and projects available to help reduce the impacts from altered hydrology and flooding, there is a lack of financial opportunities and policy to support these efforts (Minnesota Pollution Control Agency. (2020). Lower Minnesota River Watershed Restoration and Protection Strategy Report).

The Lower Minnesota River East Watershed Partnership as well as other Watershed Partnerships across the State of Minnesota have the science and data that identify and support the problems and solutions in addressing altered hydrology and flooding; however, we lack the financial opportunities and policies to implement these solutions.

Financial opportunities are by far the most significant barrier when trying to implement projects and practices that address these issues, especially for Greater Minnesota. The 7 County Metro Area has been implementing Comprehensive Watershed Management Plans for decades and as a result has had access to noncompetitive funding opportunities. However, Greater Minnesota is still in their first version of Comprehensive Watershed Management Plans, and until recently, most of Greater Minnesota had to apply for competitive funds in order to install projects and practices that reduce altered hydrology and provide storage on the landscape. Another financial barrier that we come across in Greater Minnesota is

our tax base. Populations in nonmetro areas are traditionally much lower, and therefore, limit the amount of levy dollars that are available to us. Lastly, the presence of Watershed Districts and Management Organizations is another financial barrier. A majority of Minnesota does not have Watershed Districts and Management Organizations to help leverage additional funds for projects and practices that are dedicated to water quality issues. The lack of funding opportunities in Greater Minnesota has made it difficult to implement projects and practices and provide matching funds required for grant funding sources. The projects and practices mentioned previously are expensive and cannot be paid for by only local funds; more grant funding opportunities are needed.

We not only need financial resources to help implement projects and practices on the landscape, but also policies that support these efforts. There are some legislative policies, rules, and statutes that help protect water and resources as well as promote different practices. However, the existing policies do not consider and consider the drastic changes that the State of Minnesota has experienced in recent years when it comes to changes in weather patterns and land use. We need more local and state policies that support protecting water resources, promoting different conversation practices, and incorporating climate resiliency. The impacts from altered hydrology and flooding have negative consequences to our infrastructure, environment, and public health. Furthermore, the costs to fix results from these events is creating an economic burden to Minnesota residents. In the long run, it is much more cost effective to implement projects and practices that prevent altered hydrology and flooding impacts than it is to manage these impacts once they have occurred.

The Lower Minnesota River East Watershed Partnership will continue to work on these issues and has made it a priority in our Comprehensive Watershed Management Plan to actively address altered hydrology and flooding. We thank you for the opportunity to express our thoughts, and concerns, and support in addressing these issues!

Sincerely,

Lower Minnesota River East Watershed Partnership

Submitted By: Watershed Coordinator-Holly Bushman