Upper Mississippi River Basin Downscale Climate Modeling and Regional Network Analysis

Discussion Group Plan – Group #2, Infrastructure and Planning

The Upper Mississippi River Basin Association (UMRBA), National Oceanic and Atmospheric Administration (NOAA), and University of Minnesota's Institute on the Environment (IonE) would like to welcome you to participate in an Upper Mississippi River Basin Downscale Climate Modeling and Regional Network Analysis.

The purpose of the Regional Network Analysis is to identify and understand the needs of potential users of hydroclimatic forecasts and data products. Our hope is to enhance the use of hydrologic data and models in existing decision-making and planning processes. The Regional Network Analysis will include participants from three sectors: modelers and hydrologists, infrastructure and planning experts, and emergency and mitigation managers. The Infrastructure and Planning Discussion Group (one of the focus groups) will seek input from infrastructure and planning experts to understand how downscale climate models could be used in decision-making processes.

Participants will be asked for three hours of their time: one hour will be used for materials review and reflection; two hours will be used to participate in a facilitated meeting hosted by UMRBA on Thursday, November 30th from 10 AM to 12 PM. After the meeting, a summary of the discussion will be sent to participants for review. Additional comments will be accepted at that time.

Discussion Questions:

Participants are asked to spend one hour reviewing the attached model description and answering some of the following discussion questions before the meeting date:

1. What kind of climate/hydrologic data and models do you currently use? How do you use them? What makes these outputs useful?

2. When creating a flood mitigation plan, what do you use to understand risk? What do you wish you knew?

3. How do you account for the uncertainty of models and predictions when making decisions? How do you recognize, acknowledge, and use uncertainty?

4. How do you track which communities may be underserved in your area? How do you plan to incorporate the needs of underserved communities in future climate adaptation and disaster management plans?

5. How could we provide outputs that would help you communicate with non-technical audiences? Which are the most valuable data products and formats for that work?

6. What sort of administrative process is required for you to use this product (e.g., US Army Corps certification)?