DATE: March 30, 2023

TO: The Middle Rio Grande Endangered Species Collaborative Program (MRGESCP) Executive Committee (EC)

FROM: The MRGESCP Science and Adaptive Management Committee (SAMC)

RE: Recommendations from October 2022 MRGESCP Workshop on Management of Vegetated Islands and Bank-attached Bars

Following the October 2022 Workshop on Management of Vegetated Islands and Bank-attached Bars, the SAMC reviewed problem statements, objectives and strategies developed during the breakout sessions, and identified key findings from the workshop. This memo summarizes those findings and recommends to the EC next steps for the MRGESCP regarding this important topic.

First, although the focus of the breakout sessions was management of vegetated islands and bars, participants quickly realized that this management has many implications and requires the balancing of three primary management priorities within the MRG: water delivery, flood control, and ecosystem management. The critical question became: *How do we balance these priorities through collaboration and partnerships in the face of a dynamic river system?*

Importantly, bars and islands are not replacements for the floodplain. Although bars and islands might create habitat for certain species under certain conditions and generate ecosystem services, they also affect important water conveyance and sediment transport processes in the channel. Formulation of a conceptual model is suggested for the vegetated island/bar phenomenon in the Middle Rio Grande. This model should account for spatial and temporal successional changes on islands and bars, as well as potential trade-offs regarding habitat formation/loss for different species. The model will help to characterize trends and conditions, which in turn help to identify management alternatives (e.g., maintaining a mosaic of different habitats within a reach) and potential impacts associated with each.

Finally, a more comprehensive and common understanding of the workshop topic is needed. To address this need, workshop breakout groups proposed strategies for tool development (i.e., maps and models), defining technical terms and relationships relating to this topic, and a summary report to develop consensus among stakeholders. Groups also identified research, planning and management needs, particularly all relevant data sets that are currently available, as well as data gaps. A designated team (or additional workshop) was suggested to carry these efforts forward.

The SAMC, therefore, recommends the following next steps in support of collaborative planning and management of vegetated islands and bars in the Middle Rio Grande:

* Develop common definitions for relevant technical terms relating to vegetated islands and bars
* Identify currently available, relevant data sets and data gaps
* Summarize in a report the research, planning and management efforts and needs regarding management of vegetated islands and bank-attached bars.
* Develop a conceptual model representing the ecosystem functions and physical river conditions of interest and develop management goals around these (e.g., ideal conceptual river cross sections and profiles, functional wetlands).