Summary of Report Changes

A public review of the Draft Great Lakes and Mississippi River Interbasin Study—Brandon Road (GLMRIS-BR) Report was held from August 7, 2017 to December 8, 2017. Comments received during the public review period were reviewed by the USACE, categorized, and responded to in a comment summary document (Appendix P). Based on input received during the public comment period as well as additional engineering evaluation, changes were made and incorporated into the Final GLMRIS-BR Report. Substantive changes and updates to the report are outlined below.

- **Water Jets to Bubble Curtain** - Water jets were included as part of the Tentatively Selected Plan with the purpose of addressing fish entrainment; the removal of small and/or stunned fish from the spaces between barges. Early studies and physical models were promising; however, an August 2017 large-scale field demonstration in the Chicago Area Waterway System revealed that water jets, though effective, the design and water requirements would be infeasible for a Brandon Road application. This same field demonstration showed that water entrained with air increased turbulence in barge recesses and was an efficient and less expensive technology to use in place of water jets. Based on these findings, the water jet measure was replaced an air bubble curtain to address fish entrainment. See Chapter 9 in the Main Report for additional details.

- **Mooring Cells Removed** – In response to the cost growth of the Recommended Plan, the project delivery team reviewed each measure included in the Recommended Plan to ensure each contributed to the plan’s effectiveness of reducing the risk of Mississippi River Basin aquatic nuisance species (ANS) establishment in the Great Lakes Basin (GLB). In the original formulation, mooring cells were included as a supporting measure to reduce impacts on navigation if vessels were required to reconfigure due to the continuous operation of the electric barrier. Based on further analysis, USACE is uncertain whether the electric barrier can operate continuously during vessel traffic and therefore, the mooring cells are not necessary. Additionally, the mooring cells are a navigation feature and not a measure that would reduce the risk of ANS establishment in the GLB. Consequently, mooring cells have been removed as a supporting measure in the Recommended Plan. See Chapter 9 in the Main Report.

- **Implementation Strategies** – In the Draft GLMRIS-BR Report, only one implementation strategy was presented for the Tentatively Selected Plan, an expedited implementation strategy. For the Final GLMRIS-BR Report, two implementation strategies are presented for the Recommended Plan: 1) expedited and 2) incremental. These strategies accomplish two key objectives: (1) maximize project efficacy given timely implementation of the Recommended Plan, and (2) minimize impacts on navigation by conducting much of the Recommended Plan’s in-water construction activities during planned maintenance closures of nearby locks on the Illinois Waterway. See the Executive Summary and Chapter 9 in the Main Report for additional details regarding the two implementation strategies.

- **Cost Increase** – An updated cost estimate of $777,836,000 was included in the report for the expedited implementation strategy taking into account the scope changes of the Recommended Plan as a result of additional engineering and design completed since release of the Draft Report. The updated cost estimate is based on the July 2018 certified cost estimate for the Tentatively Selected Plan with updates based on changes in scope for the Recommended Plan. See Chapter 9 of the Main Report and Appendix I, Cost Engineering for additional details regarding the updated cost estimate. See Appendix H2, Engineering - Recommended Plan for the additional engineering and design completed on the Recommended Plan.
Comment Response Appendix Added – As stated above, a public review period of the Draft GLMRIS-BR Report was held from August 7, 2017 to December 8, 2017. The USACE received more than 1,400 comments, both written and oral, on the Draft Report. In addition, there were three campaigns with over 9,700 signatories. After review of all the comments, the GLMRIS-BR team identified 11 broad categories and various subcategories of topics included in the public review comments. The USACE then developed responses for each of the comment categories/subcategories. The summary of the public comments and USACE responses are presented in a new appendix to the Final Report, Appendix P, Comment Summary Report.

Complex Noise Renamed Acoustic Fish Deterrent – The Draft GLMRIS-BR Report included a measure called Complex Noise which was included in the Tentatively Selected Plan. This measure is still included in the Recommended Plan that is presented in the Final GLMRIS-BR Report; however, the name of the measure has been changed from “Complex Noise” to “Acoustic Fish Deterrent” to more accurately describe the technology. This change has been made throughout the Final GLMRIS-BR Report and associated appendices.

Added the “Appendix H.2 – Engineering - Recommended Plan” – The Draft GLMRIS-BR Report included Appendix H – Engineering which included details on the measures that comprised the Tentatively Selected Plan as well as the other Alternative Plans that were evaluated. For the Final GLMRIS-BR Report an updated engineering appendix was included that provides information only on those measures that are included in the Recommended Plan. The engineering appendix that was part of the Draft GLMRIS-BR Report was not updated, but was instead renamed. Therefore, for the Final GLMRIS-BR Report there are two engineering appendices. Appendix H.1 – Engineering – Final Array of Alternative Plans includes information on all the alternative plans that were evaluated for the Draft GLMRIS-BR Report, including the Tentatively Selected Plan. Appendix H.2 – Engineering – Recommended Plan includes information only on the Recommended Plan that is presented in the Final GLMRIS-BR Report.

Added “Appendix N – Mitigation” – The Final GLMRIS-BR Report was updated to include details on environmental mitigation. This appendix describes the evaluation of alternative measures to accomplish the project objective of fish passage improvements on the Des Plaines River and tributaries to mitigate potential losses in longitudinal connectivity from the project.