MRRIC Charge to ISAP for Evaluation of the Effects Analysis Draft Interim Reports (EA #6)

Background

The ISAP recommended in 2011 an adaptive management plan for the Missouri River that should be "preceded by and based upon an effects analysis that incorporates new knowledge that has been accrued since the 2003 Biological Opinion." The lead agencies and MRRIC subsequently have undertaken development of a Missouri River Recovery Management Plan that will include an adaptive management approach and that is based on a year-long (and ongoing) effects analysis.

As described in the Effects Analysis Guidance Document, "The purpose of the ongoing effects analysis (EA) effort is to conceptualize and quantify the effects of system operations and actions on the listed species (piping plover, interior least tern, and pallid sturgeon). The EA is evaluating the effects of the Missouri River Project and operations (dam operations), and BSNP Mitigation and Biological Opinion management actions on the status and trends of the listed species and their habitats, within the background of hydrologic and fluvial processes on the Missouri River. The analysis is using existing data and models where applicable, developing new models as needed, and is relying upon the best scientific information available.

"...This structured analysis is being used to assess the effects ... of alternative management actions on the listed species. The effects of management should be described in terms of the likelihood of species persistence or recovery. Much of the data necessary to inform an analysis of the effects of alternative management actions can be drawn from research, monitoring, and assessment efforts that have been undertaken in the Missouri River system over the past decade. This information will inform Adaptive Management (AM) efforts and several key portions of the Management Plan and its future implementation within an adaptive management framework."

An EA Team has spent the past year plus performing the Effects Analysis. The draft EA #6 Interim Reports (a Hydrology and Hydraulics report, a Plovers and Terns report, and a Pallid Sturgeon report) integrate the results of those efforts (EA deliverables 1-5) for use by the Management Plan Product Delivery Team in crafting specific management actions and alternatives, including adaptive management actions. Additional EA products are anticipated in the future as the AM Plan is implemented.

Charge to the ISAP

MRRIC and the lead agencies would like the ISAP to review the draft EA #6 Interim Reports and provide an evaluation of to what extent it delivers what was expected and what is needed to move forward with the MRRMP and the adaptive management plan. The ISAP should consider the questions below in its evaluation of each of the draft EA #6 Interim Reports — Hydrology and Hydraulics, Plovers and Terns, and Pallid Sturgeon. Where the ISAP believes there is room for improvement the panelists should strive to provide advice and recommendations.

Status and Trends of Hydrologic Conditions and the Listed Species and their Habitats

 To what extent does the EA convey a clear understanding of the Missouri River hydrologic conditions and the status and trends of the listed species and their habitats in the program planning area?

Effects of the Corps' Actions (Water Management and BSNP) on the Listed Species and their Habitats

- 2. To what extent does the EA provide evidence of cause and effect relationships between the Corps' actions (in the context of other factors) and the listed species and their habitats?
- 3. To what extent does the EA set the stage for development of a viable strategy (adaptive management plan) for reducing uncertainty in understanding of the cause and effect relationships between the Corps' actions, other potential factors, and the listed species and their habitats?

Effects of Current and Potential Future Management Actions to Protect the Listed Species

- 4. To what extent does the EA provide credible models capable of predicting (and distinguishing) the relative efficacy or likelihood of success of current and alternative management actions for precluding or eliminating jeopardy?
- 5. To what extent does the EA provide a comprehensive list of potential management actions and an assessment of their likelihood of benefitting the listed species' and their habitat?
- 6. To what extent does the EA set the stage for development of a viable strategy (adaptive management plan) for reducing uncertainty in predictive tools for use in assessing effects of management actions on the listed species' and their habitat?