TO: MRRIC SPA Task Group

FROM: Independent Science Advisory Panel (ISAP)

RE: A note on the relationship between the identification of species objectives and

the development of the MRRP effects analysis

**DATE:** 27 June 2013

During the 25 June 2013 SPA-ISAP conference call a participant pointed to what may be perceived by some as ambiguity in ISAP statements regarding appropriate timing and sequence for two tasks in support of adaptive management under the Missouri River Recovery Program. The development of programmatic *species objectives* is a subject of upcoming workshops in July. The ISAP has previously indicated that the pending *effects analysis* process, which will be initiated after those workshops occur, is likely to provide some essential information that will be important to the quantification of objectives statements for the three listed species on the Missouri River.

Should the formulation of species objectives await completion of the effects analysis? The ISAP thinks not. The two tasks can and should proceed as planned. Each can benefit from the other in their current proposed schedule.

There is value in determining "descriptive" (or qualitative) species objectives in the short term. The identification of descriptive species objectives can help to inform the effects analysis, and the effects analysis can be used subsequently to develop the species objectives. Specifically, the population, habitat, and other environmental parameters identified as performance criteria in the species-objectives determination can be used to assess species performance in management-scenario testing in the effects analysis.

Well-framed descriptive species objectives based on "best available science" can be generated during the workshops in July. Objectives statements for each of the three listed species might

- 1) identify one or more key demographic attributes for each species, which can be used to assess their performance in response to management actions under the MRRP,
- 2) identify one or more habitat variables that can be expected to relate directly to species numbers and/or performance, and
- 3) describe environmental characteristics or phenomena that operate at the "landscapelevel" to determine metapopulation persistence, and species survival and recovery at the regional scale.