#### Initial ISETR Comments on HC Proxy Evaluation of Alternatives

Dermot Hayes John Loomis Sarah Michaels May 1, 2015

## **General Observations**

- Use of proxy analysis to project potential HC effects and generate discussion of differences among alternatives makes sense.
- ISETR is concerned that changes in methods used/assumptions from Feb – May – Aug – Nov can lead to confusion among stakeholders and potentially to different conclusions about which alternatives are "better."
  - River geometry
  - Proxies vs final metrics
- Need to manage process and expectations carefully

Effects of future river geometries to be used (reflecting anticipated aggradation/degradation) needs further assessment

- Current Conditions as a baseline by itself may not well represent NEPA "future without."
- February meeting use of 50 years out proved to be too far to be relevant for many stakeholders & involves significant forecast uncertainty.
- 10 years out (proposed for August meeting) may be a relevant time line for the stakeholders and involve less forecast uncertainty, but seems late in the process – differences in results (from May to August) may surprise stakeholders?
- Ideally show comparison of proxy results using current and 10 years out in August including implications of differences.

#### Do Proxies equal Final Metrics?

- To what extent are proxies place holders that will be replaced as final metrics become available?
- Will proxies for some concerns be used simultaneously with final metrics for other concerns?
- What if final metrics lead to different conclusions than proxies?
- How will the agencies compare results for each and gain stakeholder acceptance thereof?

#### Need to transition sooner from HC Proxies to Final Metrics in selection of alternatives to be carried forward

- HC Proxies use of averages and number of times certain thresholds are exceeded are not always good indicators of the magnitude of the impacts that their corresponding final metrics reflect.
- For example, economic metrics reflect magnitudes of effects (# of people affected, size of facility, number of acres).
- (Revised proxies to be assessed at May meeting may alleviate this issue to some extent?)

Need to transition sooner from HC Proxies to Final Metrics... (cont'd.)

- Time required to perform the HC Final Metrics (data collection, model building, analysis) is substantial for some metrics & needs to start soon.
  - It may take more time to implement Final Metrics than expected, and this may result in continued use of HC proxies.
  - Perhaps prioritize which HC Final Metrics to develop/use first based on which HC Proxies are showing major differences across Alternatives being evaluated for May meeting.

Need to transition sooner from HC Proxies to Final Metrics... (cont'd.)

- Although screening using the proxy results is appropriate, there are significant risks that better alternatives are screened out of "Final" Alternatives and poorer alternatives are carried forward to "Final" Alternatives based on the simplified HC proxies.
- Earliest possible use of more sophisticated metrics may reduce this risk.

# **Considering Extreme Events**

- Concern that 82-year period of record may not adequately capture extreme events, and that effects of rare but plausible scenarios are not being assessed – e.g. a broad-area rainfall event superimposed on an in-progress extended fall release.
- Have discussed with H&H modelers, and understand better now that:
  - The effort required to consider such a synthetic scenario in an appropriate statistical context would be substantial and outside of available time frame,
  - The 82-year record does contain variability that should capture the effects of a wide range of conditions, if not all plausible ones.

## Sideboards

- Many MRRIC members are of the opinion that the agencies and MRRIC will take extra time to re-evaluate human considerations objectives and metrics if the sideboards are to be exceeded/removed.
- Given that potential management actions are being evaluated that exceed the sideboards, can the agencies explain to members' satisfaction that the proxies and final metrics to be used adequately capture the effects of those actions on the HC objectives?

## **Mechanical Restoration**

- This may end up being the best option, yet to date, little effort has been spent to evaluate the relative cost/benefit of this potential action.
- There are hundreds of acres of land that were damaged by the 2011 flood that might be considered as an inexpensive alternative.

# **Anticipating Process Concerns**

- Can stakeholders be given the opportunity to evaluate on their own the consequences and tradeoffs, perhaps using the spreadsheets Compass is developing?
- What will be the process/criteria for deciding which and how many alternatives will be considered in subsequent rounds?
- Given the time constraints, what will be the process for communicating approaches and assumptions being used in effects modeling, and how will lack of understanding and/or disagreement, including about assumptions or analyses, be handled?