1. **What are the strengths and weaknesses of the Phase 1 remedial design?**

***Strengths**:*

- Directly addresses the primary source of Hg input based on detailed conceptual model
- Primary & secondary banks identified based on [Hg] & potential for erosion
- Reducing sediment input should improve <u>in-stream</u> habitat regardless of effects on Hg input
- Specific, achievable
- Stepwise approach allows for revisions (adaptive method)
- Early engagement with key stakeholder (city) is allowing revision of design

***Concerns**:*

- Success is highly dependent on significant cooperation with stakeholders
- Very ambitious schedule
- Will we learn enough and in sufficient time from Phase 1 to inform subsequent remediation activities? And to inform adaptive management framework?
- Have not made use of excellent talent in SRST orbit to help with review of design?

Concerns (Continued)

- Importance of erosion and sediment control during construction – use biochar in coffer dams? May be missed opportunity to focus on E&S to see how to minimize fugitive releases. Shouldn't this be part of adaptive management process – how can we learn from the Phase 1 experience?
- Concern about quick schedule – why construct in Spring when you want to minimize releases? Fall better?
- May take a longer time to complete and see responses higher in food chain than if more bank length were addressed at one time

2. Are there any critical data gaps or uncertainty concerning Phase 1 of the remedy?

and

7. What data gaps need to be filled and what preparatory steps need to be taken to prepare the stage for actions beyond Phase 1?

- How much reduction in fish Hg can we expect from a given reduction in Hg input?
- Statistical models do NOT indicate how much time will be required before these decreases will be observed
- Would be useful to have a few more moderate-scale studies before full-scale implementation

2 and 7 (CONTINUED)

- Uncertainty about universal effectiveness of biochar, esp when blended with soil-should possibly look again at earlier rejected options, new technologies and S-amended biochar?

2 and 7 (CONTINUED)

- Biochar – for phase 1 using approach to encapsulate in soil behind bank, which may not be as effective. Biochar exposed as reactive layer could be more effective, but hard to deploy and maintain. Is it even reasonable? How can we increase effectiveness in encapsulated approach?

- It would be useful to know approx. how long it will take to see a response (positive or otherwise) to the Phase 1 work.
  - Can this be modelled?
  - One modelling effort (TMDL) suggested target water Hg of 5 ng/L to achieve fish Hg <0.3 mg/kg. Was there a time course prediction???
  - Will the Reed Harris model provide a time course prediction?
  - Review of pilot monitoring data does suggest useful short-term indicators have been identified