

Memorandum for the Record

Subject: Kansas Citys Levees, Missouri and Kansas, Interim Feasibility Report and Environmental Impact Statement, Civil Works Review Board

1. The subject meeting was held 20 September 2006 from 1200 until 1430 Eastern Time. The Agenda (Attachment 1) and list of Participants (Attachment 2) are provided. Additionally the PowerPoint material used as part of this meeting is found as Attachment 3.
2. The purpose of the meeting was to gain approval by the CWRB to release the Final Interim Feasibility Report and Environmental Impact Statement for State and Agency (S&A) Review.
3. The meeting was opened by MG Johnson who offered welcoming remarks and provided an overview of the meeting purpose for the benefit of the project Sponsors.
4. Col. Michael Rossi provided the project briefing, followed by Sponsor statements. The Sponsors commented on the importance of the recommended project related to the economic and well-being of the communities that they represent.
5. Karen Durham-Aguilera provided the NWD endorsement of the recommended project, followed by Cliff Fitzsimmons, who provided the HQ OWPR summary of issue resolution and a recommendation to release the report for S&A review.
6. The following is a summary of questions and discussion that was held during the meeting:
 - a) System Approach – why break off units into a subsequent study phase? The summary report should have clearly articulated this division and that the hydraulic models support this approach. Discussion ensued on the approach to system formulation especially in regards to the Argentine levee unit, and why the feasibility study is phased into an interim and final feasibility report.
 - b) Are there subsidence issues? The top of levee elevation survey found no significant subsidence, although some isolated minor low spots were identified, and are being addressed in the overall levee review as necessary.
 - c) Will there be induced damages and/or why phase implementation of the recommendation. While there may be minor induced damages during significant and rare flood events (those exceeding approximately 250-yr.) The induced flooding is insignificant compared to the damages from normal river flooding. A determination was made by NWK and concurred by NWD that the induced damages do not create a real estate taking. The Sponsor also supported the phased approach to allow them to make appropriate financial arrangements to support the project.

- d) It was suggested that the PDT ensure lessons learned from the study and implementation of the Phase I recommendations be applied throughout the Phase II effort.
- e) All participants were reminded that this undertaking is needed to address flood damage *reduction* measures, not protection or control.
- f) A question was discussed as to how, during ITR, the hydraulic gradient issue was resolved.
- g) It was noted that the slide on Environmental Operation Principles (EOP) could have better reflected the project characteristics. Specifically, the “Sustainability” principle was discussed. It was generally agreed that discussion of EOP could be improved by the District.
- h) It was discussed that while each proposed remedy in the recommended plan is individually justified and as a system, the remedies will likely be implemented individually through separate Project Cooperation Agreements.
- i) It was also stated that it is important that the District ensure that collectively any future cost increases don’t create a situation to invoke 902 limit criteria. Discussion ensued on project cost estimate and contingencies.
- j) It was questioned whether the current EIS is limited to the Interim recommendations only. The Project Manager indicated that the current EIS does reflect some understanding of potential recommendations of the Phase II effort and associated impacts, however there will be a re-examination of those impacts during the Final Feasibility process through an EIS supplement-type documentation.
- k) A question was asked about how resilience has been built into the plan. This will need to be addressed and discussed going forward.
- l) General discussion at different points in the CWRB emphasized the need for levee studies to stay aware of new developments and guidance resulting from ongoing National Levee Safety Committee recommendations.

7. The following is a summary of lessons learned that were briefed at part of the meeting:

- a) The engagement of the entire vertical team to include the District PDT, ITR PDT, Division and HQ allowed for effective issue resolution through the study process. This effective coordination and communication should continue for all activities. The strong team cohesion has been extremely important in this complex study.
- b) It was identified that due to the complexity of the submittal packages to HQUSACE, future submittals should be delivered in person to the NWD RIT to ensure a complete package (of all required items) and appropriate number of copies. Additionally, it is imperative that the District and Division verify a correct submittal package prior to mailing to limit HQ staff effort spent to “swap pages”, if needed.
- c) HQ guidance is needed to articulate the requirements of Engineering Appendices (at a minimum), to avoid voluminous product submittals. There is not agreement

that one size fits all, because Engineering Appendices serve other purposes than just for HQ review material.

- d) It was noted that the HQUSACE OWPR is extremely invaluable throughout the study process to the PDT, however due to their workload, many staff are placed into “fire-fighter” mode. Additional staff/resources are needed for this office to further their invaluable services to project PDTs.
- e) Overall ITR/PDT worked well together, especially through the use of Dr. Checks.
- f) Development of existing conditions proved more daunting than originally thought. Much 1940’s and 1950’s design information not available.
- g) In a Sec 216 study, the results of existing condition examinations drives the scope for alternatives development. Very difficult to predict & scope alternatives on Day One. Therefore future efforts should scope a complex project in two phases 1) one to determine existing conditions and report that out and then 2) to develop the alternatives. Study costs and schedules would be more accurate if we would have enacted a 2 phased scoping process and would have provided the sponsors a better feel of the needs and requirements as they buy into the project.
- h) Risk and Uncertainty methodology varies among engineering disciplines. Still evolving in some cases.
- i) The HQ S&A letter packet included the letters and a checklist identifying which agencies should receive letters and a # for number of copies. It was not clear exactly what each agency should receive beyond the Feasibility report – should they get Appendices, Draft Chief’s report, Report Summary, etc. Additionally in some cases a zero was indicated for number of copies (Governor Offices, OASACW, DOT, and Interior). Since original mailing of the letters many of these particular offices have requested copies of the report, which have been provided in all cases. This distribution process could use some examination to avoid future confusion in this matter.

8. The meeting concluded with a positive vote by the Board members to release the report for S&A review, with the intent to execute a Chief of Engineers report by 31 December 2006.

9. The Final report was officially delivered to the USEPA on 22 September 2006, mailed to all agencies on 27 September 2006, and the Notice of Availability was published in the Federal Register on 29 September 2006.

10. Actions Items:

- a) Table 2 of the Report Summary and Table 20 of the Feasibility report need to be show in October 2005 data, and all data for the NKC and Jersey Creek should be broken out for all rows. This action can be completed during the S&A review.
- b) HQ made some edits to the Draft Chief of Engineers report, although NWK recognized a few more edits to clarify site location names. Further coordination between NWK and OWPR can be conducted during the S&A review.

CENWD-PDD

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- c) All remaining HQ copies of the Final report were used in the submittal to EPA, NWK should provide additional copies to HQ.