

DEPARTMENT OF THE ARMY
SOUTHWESTERN DIVISION, CORPS OF ENGINEERS
1100 COMMERCE STREET
DALLAS, TEXAS 75242-0216



Reply to
Attention of:

CESWD-PDS-P

07 NOV 2007

MEMORANDUM FOR Commander, Fort Worth District

SUBJECT: Review Plan Approval for the Dallas Floodway IFS, Upper Trinity River Basin Feasibility Study

1. References:

- a. EC 1105-2-408, 31 May 2005, subject: Peer Review of Decision Documents.
- b. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review Process.

2. The enclosed Review Plan for the Dallas Floodway IFS, Upper Trinity River Basin Feasibility Study has been prepared in accordance with referenced guidance.

3. This plan has been made available for public comment, and the comments received have been incorporated. It has been coordinated with the Flood Damage Reduction Planning Center of Expertise of the South Pacific Division which is the lead office to execute the plan. The Review Plan does not include External Peer Review.

4. I hereby approve this Review Plan, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this plan or its execution will require new written approval from this office. For further information on this issue please contact Brent Hyden, CESWD-PDF at (469) 487-7033.

Encl

A handwritten signature in black ink, appearing to read "Kendall P. Cox".

KENDALL P. COX
Colonel, EN
Commanding

DALLAS FLOODWAY, TEXAS
Project Review Plan
Independent Technical Review and External Peer Review

1. PURPOSE

Pursuant to Engineering Circular (EC) 1105-2-408, "Peer Review of Decision Documents," Office of Management and Budget's "Final Information Quality Bulletin for Peer Review," and the May 30, 2007 memorandum from Major General Don Riley, USACE Director of Civil Works, a Project Review Plan (PRP) is being developed. This Project Review Plan presents an analysis of the process for independent technical review (ITR) and external peer review (EPR) that will be implemented as part of the Upper Trinity: Dallas Floodway feasibility study. These processes are essential to improving the quality of the products that we produce.

2. APPLICABILITY

The document provides the PRP for the Dallas Floodway Feasibility Study. It identifies the ITR and EPR process for all work conducted as part of the study, including in-house, non-Federal sponsor, and contract work efforts.

3. REFERENCES

EC 1105-2-408 "Peer Review of Decision Documents" dated May 31, 2005
ER 1105-2-100 "Planning Guidance Notebook," dated April 2000
Major General Riley Memorandum on Peer Review Process, dated May 30, 2007

4. GENERAL

The Dallas Floodway study area is located entirely in Dallas County, Texas. The Dallas Floodway extends along the Trinity River upstream from the AT&SF Railroad Bridge at Trinity River Mile 497.37, to the confluence of the West and Elm Forks at River Mile 505.50, thence upstream along the West Fork for approximately 2.2 miles and upstream along the Elm Fork approximately 4 miles. Of the 22.6 miles of levees within this measure, the East Levee is 11.7 miles in length and the West Levee is 10.9 miles in length. In addition to the measure levees, the Floodway includes improved channel over the measure reach and structures including six pumping plants, five pressure conduits, and seven drainage structures.

The original Dallas Floodway levees and interior drainage improvements were completed between 1928 and 1931 by the City of Dallas and Dallas County Levee Improvement District. The Trinity River was rerouted by constructing a channel within the leveed floodway. The original channel was either filled or used for sump storage.

In the mid 1940's, major floods, compounded with continued urbanization in the watershed draining into the Floodway system resulted in severe flooding. As a result, several Corps

of Engineers improvements to the Dallas Floodway were completed in 1959. The improvements included reinforcing and raising the levees to provide conveyance of the Standard Project Flood within the floodway plus 4-feet of freeboard.

To improve interior drainage, additional pump stations were constructed and the channel within the floodway was modified, by excavating it to an average depth of 25 feet with a 50 foot bottom width, to provide the design capacity of 13,000 cfs. The Dallas Floodway Measure removed approximately 10,500 acres from the floodplain, most of which is now highly developed industrial property.

5. REVIEW REQUIREMENTS (Independent Technical Review)

As part of the Quality Control Plan for the Dallas Floodway Project, an ITR team will be formed to perform periodic reviews of the feasibility study efforts, including the project assumptions, analyses, and calculations, as needed throughout the planning study process. The ITR is best conducted by experienced peers within the same discipline who are not directly involved with the development of the study or project being reviewed.

Pursuant to EC 1105-2-408, the District will coordinate with the Flood Damage Reduction Planning Center of Expertise (South Pacific Division) to organize a team to perform the ITR at various stages throughout the study. The ITR point-of-contact at South Pacific Division is Clark Frentzen (CESPD-PDS-P).

The ITR team will meet with project delivery team (PDT) members on a quarterly basis or as needed. These quarterly meetings will be documented as required by ER 1165-2-203. Coordination throughout the study will be accomplished through individual contact between the PDT and the ITR team. The ITR will focus on the following:

- Review of the planning study process,
- Review of the methods of analysis and design of the alternatives and recommended plan,
- Compliance with program and NEPA requirements, and
- Completeness of study and support documentation

More detailed ITR information is found in the Plan Formulation and Evaluation Section of the Project Management Plan (PMP).

6. REVIEW PROCESS

The ITR process will be conducted throughout the study process. ITR involvement is anticipated between major project milestones (FSM, IPR, and AFB). Once the ITR team has been identified, copies of PDT meeting notes will be provided to ITR team for information. ITR participation in PDT meetings on a quarterly basis (at a minimum) will be recommended.

7. REVIEW COST

The cost for ITR is estimated at \$75,000.

8. REVIEW SCHEDULE

TASK	Proposed Date
Develop Project Review Plan	October 12, 2007
Coordinate with MSC and post on website	October 22, 2007
PCX identifies ITR team	January 3, 2008
Review of Models	TBD
ITR review of FSM documents	TBD
ITR review of draft documents (before AFB)	TBD
Participation in AFB meeting	TBD

9. PROJECT RISK

Anticipate minimal risk involved with the project.

10. PROJECT REVIEW PLAN

The components of the PRP were developed pursuant to the requirements of EC 1105-2-408.

A. General Information

The decision documents that will undergo peer review are the Feasibility Report (including Economic Appendix), Environmental Impact Statement, and Engineering Appendix. The District PDT is listed below:

1. District Project Delivery Team

NAME/ORGANIZATION	PHONE	EMAIL
Account Manager		
Project Manager		
Operations / Maintenance Manager		
Civil Engineer		
Cost Engineer		
Cultural Resources (Archeologist)		
Economist		
Environmental (Biologist)		
Geographic Information System Lead		
Geotechnical Engineer		
Structural Engineer		
Public Affair Officer		
Realty Specialist		

2. ITR Team – TBD

B. Scientific Information

The final feasibility report (and supporting documentation) is anticipated to contain standard engineering, environmental and economic analyses and information; therefore no influential scientific information is likely to be contained in any of the documentation.

C. Timing

The peer review process is projected to begin at the beginning of CY08 with the initiation of the ITR team during the review of the plan formulation phase of the study.

D. EPR Process

Engineering Circular (EC) 1105-2-408 requires external peer reviews for projects where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or models, presents conclusions that are likely to change prevailing practices, addresses important public safety risks (e.g. designs that include floodwalls) or is likely to affect policy decisions that have a significant impact.

The Dallas Floodway Project is a flood risk management study for increasing the level of protection to the City of Dallas through the raising of the existing earthen levees. This project is seen as a component of the larger City of Dallas “Balanced Vision Plan”.

The Balanced Vision Plan for the Trinity River Corridor in Dallas includes a master plan that was approved by the Dallas City Council in December 2003 and amended in March 2004. The plan includes flood damage reduction, ecosystem restoration, and recreation initiatives that can be accomplished between the levees along an eight-mile stretch of the existing Dallas Floodway. Specific project components include: levee raises / stabilization for additional flood protection for downtown Dallas; bridge modifications for additional flood protection and river meandering; 90 and 60-acre flood conveyance lakes that would contribute to flood damage reduction, ecosystem restoration, and recreation; a lake recharge system that would provide reuse of treated wastewater discharge for water quality and recreation purposes; over 400 acres of new wetlands within the Dallas Floodway; miles of trails, park roads, and public access points for visitation; recreation playing fields; and Trinity River meanderings and riparian habitat to replace a previously straightened river channel. This City “Balanced Vision Plan”, plus an Interior Levee Drainage Study Phase-I report, Dallas, Texas, dated September 2006, is included for authorization in the pending Water Resources Development Act of 2007 (WRDA 07).

The current federal project is a component of the City Council-approval Dallas Balanced Vision Plan. However it is important to draw the distinction that the federal project is limited to raising elevations of existing levees and does not currently include the other elements in the City's plan. Based on this it is anticipated that the study report will not raise influential scientific information, nor a highly influential scientific assessment. It will not be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, present conclusions that are likely to change prevailing practices, and is not likely to affect policy decisions that have a significant impact. But rather, the study should be a routine flood risk management study using conventional methods and models or analysis, analyze conventional alternative plans of improvement, and is expected to recommend a non-controversial plan for implementation.

In addition, the cost of the Federal plan, which must be economically justified, is expected not to exceed \$40 million. The environmental, hydraulic, and geotechnical issues associated with this project are not unusual and the construction methods are expected to be typical or nationally accepted practices. Further the existing floodway system has a level of protection of between 500-year and 800-year. Therefore, the scope and technical complexity of this project is not expected to warrant External Peer Review (EPR).

However, since the Dallas Floodway feasibility study is in the early stages and the overall project scope would be increased if the WRDA 07 becomes law, the need for EPR will be reassessed as the study progresses or the project increases in scope, size or complexity.

E. Public Comment

A Public Scoping Meeting was held in Dallas, Texas on December 13, 2005. An Interagency Executive Team (IET) made of representatives from the District, non-Federal sponsor, state and Federal resource agencies, and interested groups was being formed as part of the study. The IET is participating in all aspects of the study, including identifying potential sensitive resources and environmental issues and developing ways to address those issues. A Public Involvement Plan will be formulated to ensure public involvement throughout the feasibility study process. Public comments will be made available on the project website.

TASK	START DATE	FINISH DATE
Public Scoping Meeting	December 13, 2005	December 13, 2005
Public Involvement Plan	TBD	TBD
IET Meetings	June 2000	TBD

F. Dissemination of Public Comments

Proceedings from all public meetings, minutes from any public involvement meetings will be posted on the Dallas Floodway Project website (both City and Corps).

G. Reviewers

Since the feasibility study is a flood risk management study to increase protection to the City of Dallas, anticipated disciplines of ITR reviewers are:

1. Engineering (hydrology and hydraulics)
2. Economics
3. Environmental
4. Real Estate
5. Planning
6. Operations

H. Review Disciplines

A brief description of the disciplines required for the ITR team are identified below:

1. Hydrology and hydraulics – the reviewer(s) should have extensive knowledge of river hydrology / hydraulics flood damage reduction measures and ecosystem restoration features.
2. Economics – the reviewer should have a strong understanding of economic models flood damage reduction measures and ecosystem restoration features.
3. Environmental – the reviewer(s) should have strong background in river ecosystems flood damage reduction measures and ecosystem restoration features, and Texas environmental laws and regulations.
4. Real Estate – The reviewer should have knowledge in reviewing RE Plans for feasibility studies (e.g. flood risk management and ecosystem restoration).
5. Planning – The reviewer(s) should have a strong knowledge in current planning policies and guidance related to feasibility studies.

I. EPR Selection

An External Peer Review is not currently anticipated for this study; however, since the Dallas Floodway feasibility study is in the early stages, the need for EPR will be reassessed as the study progresses.