DECISION DOCUMENT REVIEW PLAN
USING THE NATIONAL PROGRAMMATIC REVIEW PLAN MODEL
for
Continuing Authorities Program
Section 14 Projects

Highway 58 Bridge, White River
Guion, Arkansas
Section 14 Project

Little Rock District

MSC Approval Date: October 28, 2011
Last Revision Date: July 19, 2011

US Army Corps of Engineers ®

DECISION DOCUMENT REVIEW PLAN
USING THE NATIONAL PROGRAMMATIC REVIEW PLAN MODEL

Highway 58 Bridge, White River
Guion, Arkansas
Section 14 Project

TABLE OF CONTENTS

ATTACHMENTS

1. **PURPOSE AND REQUIREMENTS**

a. Purpose. This Review Plan defines the scope and level of peer review for the Highway 58 Bridge, White River, Guion, Arkansas Feasibility Report and Environmental Assessment. The purpose of the project is to provide protection of the south bank of the White River at the Highway 58 Bridge to stop the bank erosion that is threatening the bridge.

Section 14 of the Flood Control Act of 1946, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design and construct emergency streambank and shoreline works to protect public services including (but not limited to) streets, bridges, schools, water and sewer lines, National Register sites, and churches from damage or loss by natural erosion. It is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization.

See Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F for additional Information on this program.

b. Applicability. This review plan is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in ER 1165-2-209 Civil Works Review Policy. A Section 14 project does not require IEPR if ALL of the following specific criteria are met:

- The project does not involve a significant threat to human life/safety assurance;
- The total project cost is less than $45 million;
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an Environmental Impact Statement (EIS),
- The project/study is not likely to involve significant public dispute as to the size, nature, or effects of the project;
- The project/study is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;
- The information in the decision document or anticipated project design is not likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices;
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

Any of the above criteria not met requires deviations to this model Programmatic Review Plan by the home district. The deviated review plan requires coordination with the

appropriate Planning Center of Expertise (PCX) and approval by SWD in accordance with EC 1165-2-209.

Applicability of the model National Programmatic Review Plan for a specific project is determined by the home MSC (SWD). If the MSC determines that the model plan is applicable for a specific study, the MSC Commander may approve the plan (including exclusion from IEPR) without additional coordination with a PCX or Headquarters, USACE. The initial decision as to the applicability of the model plan should be made no later than the Federal Interest Determination (FID) milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. A review plan for the project will subsequently be developed and approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study. In addition, per EC 1165-2-209, the home district and MSC should assess at the Alternatives Formulation Briefing (AFB) whether the initial decision on Type I IEPR is still valid based on new information. If the decision on Type I IEPR has changed, the District and MSC should begin coordination with the appropriate PCX immediately.

This review plan does not cover implementation products. A review plan for the design and implementation phase of the project will be developed prior to approval of the final decision document in accordance with EC 1165-2-209.

c. References

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
(2) Director of Civil Works' Policy Memorandum #1, Jan 19, 2011
(3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2010
(4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
(6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

d. Requirements. This programmatic review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and ensuring that planning models and analysis are compliant with Corps policy, theoretically sound, computationally accurate, transparent, described to address any limitations of the model or its use, and documented in study reports (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for Section 14 decision documents is SWD. SWD will coordinate and approve the review plan and manage the ATR of the feasibility phase. The Little Rock District will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the Division Office to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

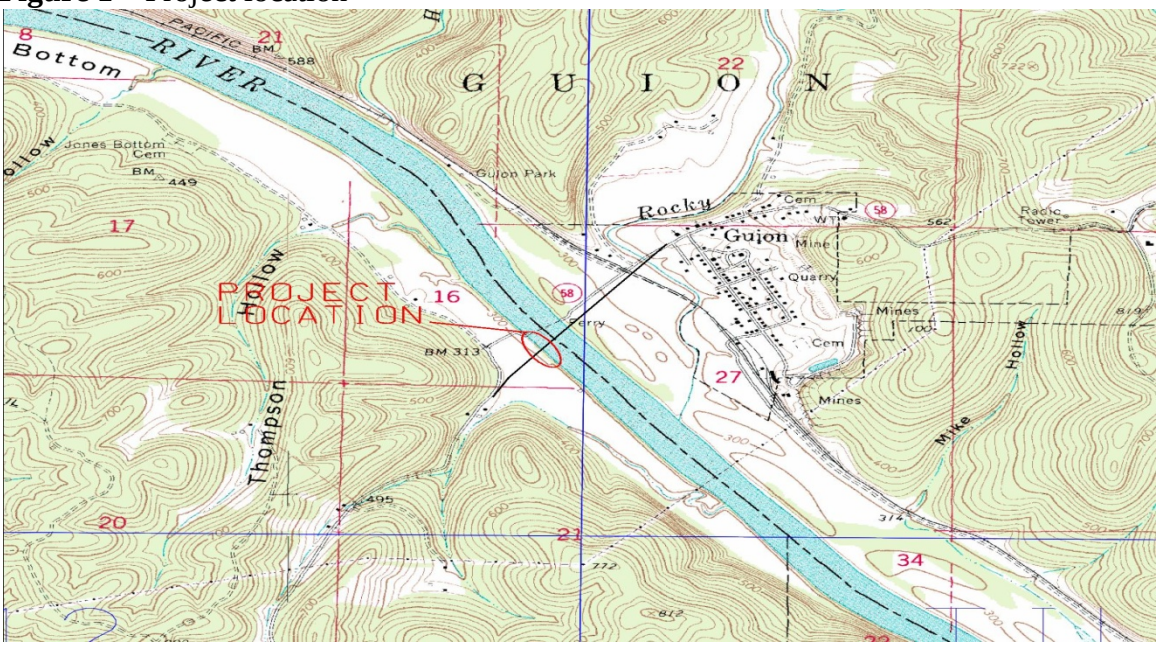
a. Decision Document. The Highway 58 Bridge, White River, Guion, AR, decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of the decision document (if policy compliant) is SWD. An Environmental Assessment (EA) will be prepared along with the decision document.

b. Study/Project Description.

The Corps of Engineers, Little Rock District (Corps), and the local sponsor, the Arkansas Highway and Transportation Department are undertaking an emergency streambank stabilization project on the White River as authorized by Section 14 of the Flood Control Act of 1946, as amended.

Location: The project area is located at RM 329.2 which is approximately 187.5 miles above the Des Arc Gage on the White River. The Highway 58 Bridge is located about one mile southwest of Guion and 14 miles northeast of Mountain View in Stone County. Figure 1 is a map of the project location.

Figure 1 – Project location



Existing Conditions: Prior to the bridge being built, the floodplain was around 1300 feet wide and at elevation 300 feet. Once the bridge was built, the embankments on both sides of the river restricted the floodplain to 650 feet wide. This leaves 50% of the original floodplain to convey floodwaters past the bridge location. The reduction in flow area causes localized water velocities to increase to maintain a constant discharge through the bridge. The higher localized velocities for out-of-bank flows has been a contributing factor in eroding the right and left banks immediately upstream and downstream of the bridge. Another contributing factor is the large spur dike the Arkansas Game and Fish Commission built to provide a slack water area for a launching ramp immediately upstream of the bridge on the left descending bank. The spur dike is too tall and constricts the flow through the bridge at lower discharges. During higher discharges, the flow overtops the dike and then scours out the bank immediately downstream.

Alternative 1:
This alternative consists of placing 750ft of Longitudinal Fill Stone Toe Protection (LFSTP) with full bank paving along the right bank of the affected area. The bank paving will be modeled after the successful project completed in the mid 1980s at RM 299.5, approximately one mile downstream of the proposed project that is still functioning as designed.

The LFSTP will be placed parallel to the right bank with a crest elevation of 280 ft. An upstream key 160 ft long will be place along side of the existing ferry road. The downstream key will extend 100 ft into the bank. A 2 ft minimum thickness rock blanket will be used to armor the bank to elevation 305 ft. The rock blanket will be placed directly on the existing bank, varying in thickness to conform to the design grade of 1V:1.5H. Self filtering Grade C stone will be used for construction of the toe protection, keys, and bank paving riprap. A conceptual drawing showing the project limits is shown in Figure 2. Typical cross sections of each alternative are displayed in Figure 3.

This alternative will stabilize the bank by providing launchable stone to fill any future scouring of the toe. Also an armored bank will prevent further bank erosion caused by high velocities and rapid drawdown of the water level. The LFSTP will also help provide fish habitat and allow for vegetation to develop along the stabilized bank.

Alternative 2:
Same as Alternative 1 except that the rock blanket will stop at elevation 288 ft.

Alternative 3:
This alternative consists of placing Longitudinal Peak Stone Toe Protection (LPSTP) and using bioengineering methods for bank protection. 750 ft of LPSTP will be placed parallel to the right bank with a crest elevation of 280 ft. An upstream key 160 ft long will be place along side of the existing ferry road. The downstream key will extend 100 ft into the bank. Grade B stone will be used for construction of the toe protection and keys. The upper bank will be sloped to a 1V:1.5H using fill material cut from the existing bank. The upper part of the bank will be vegetated using a variety of bioengineering and biotechnical methods that can include any one or a combination of the following methods:

- Live staking – Insertion of live woody stake cuttings, typically 0.5-1 m lengths, on slopes or stream banks. The portion of the stem in the soil will grow roots (reinforcing soil), and the exposed portion will develop into a bushy riparian plant.
- Pole planting – Larger and longer than live stakes, these can provide better mechanical bank protection during plant establishment. Dense array of posts can reduce velocities near the bank and posts reinforce banks against slumping.
- Live siltation – Installation of willow cuttings along a trench, excavated at the water's edge. The cuttings are inclined to overhang the river, with soil placed back in the trench. This method increases the bank roughness, which encourages deposition and reduces bank erosion.
- Branch layering – Live brush layers are layers of live willow cuttings that alternate with successive lifts of soil fill. Several layers are built to reinforce the slope or embankment.
- Planting Grass – Bare Areas and other upper bank areas disturbed during construction will be prepared and seeded with appropriate seasonal grasses to produce optimum growth.

Alternative 4:
Same as Alternative 3 except that fill material will be brought in. The bank will be graded to 1V:1.5H slope using the fill material. There will be no cutting into the existing bank.

No waivers are anticipated.

c. Factors Affecting the Scope and Level of Review. The study analyses are well within the scope that is typical for similar bank stabilization studies. The design will be standard with none of the design considered to be innovative, precedent–setting, unduly complicated, or vulnerable.

If the bank is not stabilized, the Arkansas Highway and Transportation Department will be forced to relocate its bridge and they estimated this cost to be $3,000,000. The March 2008 flood event on the White River in the vicinity of Guion was estimate to be between a 50-25 year event. If the project area continues to have high water events, then the bridge is at risk of failure. From the aerials, in the vicinity of the bridge, the bank has moved landwards approximately 20 feet. Currently, there is little vegetation left on the bank and it is nearly a vertical wall which means another flood event like what happened in 2008 could possibly take out the bridge. It appears that if the bank was going to erode another 40 feet, the bridge would fail. If the bridge fails, then emergency vehicles into Guion would have to take Highway 9 west into Allison, then Highway 9 north into Melbourne, then 69 east to Highway 58. This route would add an additional 47 miles or an additional hour to an emergency response. A chart showing the potential effects of the project failing and the effects on the economics, environment, and public safety is included as Attachment 1.

- EC 1165-2-209 requires Type I IEPR if the estimated cost of the proposed project is greater than $45 million. Highway 58 Bridge has an estimated project cost of around $500,000. Type I IEPR is not required for this study.
- EC 1165-2-209 requires Type II IEPR if the proposed project is a Flood Risk Management project where potential hazards pose a significant threat to human life. Highway 58 Bridge is a streambank protection project. It is anticipated the project will not pose a significant threat to human life. Type II IEPR is not anticipated for this study.

Consequently, the recommendation of the District, with Major Subordinate Command (MSC) concurrence, is that the level of review be ATR. Requirement for a Type I and Type II IEPR is not anticipated.

Challenges: The features of the Highway 58 Bridge study involve environmental, economic, real estate considerations and hydrology and hydraulics (H&H).

- Human Safety: It is anticipated the project will not pose a significant threat to human life and the project will have little risk of structural failure for any plan. Risk to human safety will be thoroughly and continuously assessed throughout formulation of the with-project conditions.
- Peer review: It is anticipated that the Governor of Arkansas will not request a peer review by independent experts.
- Controversial Issues: It is also anticipated that no significant public dispute or controversy will result from the Highway 58 Bridge. Potential controversial issues will be assessed throughout formulation of the with-project conditions.
- Precedent-Setting Methods: Information presented in the Highway 58 Bridge study is based on standard methods for design, cost estimating, hydrology and hydraulics, economics and environmental assessment. The models that were used have been corporately certified.
- Cultural and Environmental: It is anticipated that the study will not have an adverse impact on cultural or environmental resources. Existing environmental conditions have been assessed. Project is not anticipated to have an adverse impact upon critical habitat or any endangered species. Cultural and environmental aspects will be thoroughly and continuously assessed throughout formulation of the with-project conditions.

d. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. In the Feasibility Phase, there is no in-kind contribution. Arkansas Highway and Transportation Department is responsible for 35% of the total project shared costs in the Design and Implementation Phase, but they will receive a credit for lands, easements, rights of way, relocations, and disposal areas.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Highway 58 Bridge, White River, Guion, AR Feasibility Study Project Management (PMP), dated February 2011 (to which this Review Plan will ultimately be appended). It is managed in the District and may be conducted by in-house

staff as long as the reviewers are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) review, etc. The PDT, including the non-federal sponsor, is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before the approval by the District Commander. In addition, non-PDT members and/or supervisory staff will conduct a review for major draft and final products, including products provided by the non-Federal sponsor as in-kind services following review of those products by the PDT. Members of the PDT are listed in Attachment 2.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, best practices, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from inside the home MSC because of the size and scale of this project.

a. Products to Undergo ATR. ATR will be performed throughout the study in accordance with the District and MSC Quality Management Plans. The ATR shall be documented and discussed at the Alternative Formulation Briefing (AFB) milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include the Feasibility Report and the Environmental Assessment.

b Required ATR Team Expertise. Due to the scale of the project, the ATR team should be minimal.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with experience in preparing Section 14 decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). The ATR Lead MUST be from outside Little Rock District.
Planning	The Planning reviewer should be a senior water resources planner with experience in plan formulation as it pertains to Section 14 projects.
Environmental & Cultural Resources	Team members should be familiar with the NEPA and HTRW process for similar studies and projects. Experience should include knowledge of streambank protection, HTRW, Cultural Resources and Ecosystem Restoration. The team member should be a subject matter expert on application and documentation of the NEPA process.
Cost Engineering	Cost DX Pre-Certified Professional with experience preparing cost estimates for small CAP Section 14 Streambank Protection projects. Team member should be familiar with cost estimating for similar streambank protection projects using MCACES.
Real Estate	The Real Estate reviewer should be a real estate specialist with experience in real estate issues as they pertain to Section 14 projects.

c. Documentation of ATR. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

(1) The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;
(2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
(3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
(4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-2-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed prior to the District Commander signing the final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

1. Type I IEPR. For Section 14 decision documents prepared under the model National Programmatic Review Plan, Type I IEPR is not required.

2. Type II IEPR. For Section 14 decision documents prepared under the model National Programmatic Review Plan, Type II IEPR is not anticipated to be required in the design and implementation phase.

a. Decision on IEPR. Based on the information and analysis provided in the preceding paragraphs of this review plan, the project covered under this plan is excluded from IEPR because it does not meet the mandatory IEPR triggers and does not warrant IEPR based on a risk-informed analysis. If any of the criteria outlined in paragraph 1(b) are not met, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the appropriate PCX and approved by the home MSC in accordance with EC 1165-2-209.

b. Products to Undergo Type I IEPR. Not applicable.

c. Required Type I IEPR Panel Expertise. Not Applicable.

d. Documentation of Type I IEPR. Not Applicable.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. For decision documents prepared under the model Programmatic Review Plan, Regional cost personnel, either in the Kansas City or Galveston Districts ,who are pre-certified by the DX will conduct the cost engineering ATR. The DX will provide the Cost Engineering DX certification. The RMO will coordinate with the Cost Engineering DX on the selection of the cost engineering ATR team member.

9. MODEL CERTIFICATION AND APPROVAL

The approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC Commanders are responsible for assuring models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Therefore, the use of a certified/approved planning model is highly recommended should be used whenever appropriate. Planning models

are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.

The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.

a. Planning Models. The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
HEC-FDA 1.2.4 (Flood Damage Analysis)	The Hydrologic Engineering Center's Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along the White River near Guion, Arkansas to aid in the selection of a recommended plan for streambank protection.	Certified

b. Engineering Models. The following engineering models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
HEC-RAS 4.0 (River Analysis System)	The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Wild River and its tributaries. [For a particular study the model could be used for unsteady flow analysis or both steady and unsteady flow analysis. The review plan should indicate how the model will be used for a particular study.]	HH&C CoP Preferred Model
MicroStation	This software is used primarily for creating construction drawings including advanced modeling and rendering features. It can provide specialized environments for architecture, civil engineering, mapping, or plant design, among others.	Certified
MII	This is a cost estimating model that was developed by Building Systems Design Inc. The Army Corps of Engineers began using this model in 1989.	Certified
River Morph	Geomorphic study	Certified
Utaxas4	Slope stability Analysis	Certified

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. The estimated cost per ATR is $3,000. The ATR review of the Final Feasibility Report and Environmental Assessment was completed by SWD on 10 June 2011. The next ATR will be performed by Tulsa District on the 90% plans and specs and is scheduled to be completed 11 August 2100.

b. Type I IEPR Schedule and Cost. Not applicable.

c. Model Certification/Approval Schedule and Cost. For decision documents prepared under the model Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, review of the model for use will be accomplished through the ATR process. The ATR team should apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models.

11. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this review plan as partner agencies or as technical members of the PDT, as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The ATR team will be provided copies of public and agency comments. Following the NEPA process, there will be an opportunity for a 30 day public review of the draft document.

As required by EC 1165-2-209, the approved Review Plan will be posted on the District public website for public comment. While there is not a formal comment period, the public will have an opportunity to comment on the types of reviews to be carried out. If and when comments are received, the PDT shall consider them and decide if revisions to the review plan are necessary. Once a month on average, meetings are held with personnel from the Arkansas Highway and Transportation Department.

12. REVIEW PLAN APPROVAL AND UPDATES

The home MSC Commander is responsible for approving this review plan and ensuring that use of the Model Programmatic Review Plan is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. The home district is responsible for keeping the review plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the review plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. Significant changes may result in the MSC Commander determining that use of the Model Programmatic Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209 and Director of Civil Works' Policy Memorandum #1. The latest version of the review plan, along with the Commanders' approval memorandum, will be posted on the Little Rock District's webpage.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Study Manager, Little Rock District, 501-324-6139
- CAP Program Manager, Little Rock District, 501-324-6139
- CAP Program Manager, Southwestern Division, 469-487-7032

CESWL-PE 08 July 2011

MEMORANDUM FOR RECORD
Subject: Risk and Consequences Rating for Highway 58 Bridge, white River, Guion, AR, Section 14 Emergency Streambank Protection Project

Based on the Continuing Authorities Program Risk and Consequences Matrix, developed by Mr. Steven Coker, the Highway 58 Bridge Section 14 Project has a rating of 1. This means that the project is in Consequences Category A and has a Risk Level of A.

The project meets the following criteria in order to be included in Consequences Category A: the cost of replacement or relocation of the bridge was estimated by the local sponsor, the Arkansas Highway and Transportation Department (AHTD), at $3.5 million and failure of the stream bank to be protected would affect facilities critical to public health, safety and welfare. If the bridge fails, then emergency vehicles traveling into Guion would have to take Highway 9 west into Allison, AR, then Highway 9 north into Melbourne, AR, then 69 east to Highway 58. This route would add an additional 47 miles or an additional hour to an emergency response which would be a critical impact to the health, safety and welfare of the residents in the project area.

The project has a Risk Level of A, which means the undesirable event is most likely to occur within the next 0-2 years. There has been consistent migration of the erosion towards the affected facilities particularly with the March 2008 flood event on the White River which was estimated to be between a 25-50 year event. If the area had another flood event like what happened in 2008 it could possibly take out the bridge.

Renee S. Wright
Cap Program Manager

Attachment 2 Team Roster

TABLE 1: Project Delivery Team	
NAME	TITLE
Renee Wright	Project Manager
Darrell Montgomery	Contracting
Bob Singleton	Biologist
Gabe Knight	Hydraulic & Hydrology Engineer
Rob Gaines	Construction
LaTasha Rideout	Real Estate
Aaron Cole	Design Engineer
Paul Wagener	Cost Engineer
Russ Wallace	Economist
Chris Page	Archeologist
Brooks Booher	Arkansas Highway and Transportation Department

Vertical Team: The Vertical Team consists of members of the MSC and CESWL Offices. The Vertical Team plays a key role in facilitating execution of the project in accordance with the PMP. The Vertical Team is responsible for providing the PDT with Issue Resolution support and guidance as required. The Vertical Team will remain engaged seamlessly throughout the project via monthly teleconferences as required and will attend In Progress Reviews and other key decision briefings. The CESWD District Liaison is the District PM's primary Point of Contact on the Vertical Team.

Agency Technical Review (ATR)

TABLE 2: Agency Technical Review Team – 95% Design Submittal		
NAME	**DISCIPLINE**	**OFFICE SYMBOL**
TBD	Civil/Team Leader	TBD
TBD	Geotechnical	TBD
TBD	Hydrology and Hydraulics	TBD
TBD	Structural	TBD
TBD	Cost Estimate	TBD
TBD	Real Estate	TBD

External Peer Review Panel

TABLE 3: Recommended External Peer Review Panel		
NAME	**DISCIPLINE**	**EDUCATION & EXPERIENCE**
To be independently selected	Civil, P.E.	BS in Civil Engineering, 20+ years experience in the civil design and construction of levees.
To be independently selected	Geotechnical, P.E.	BS in Civil/Geotechnical Engineering, 20+ years experience in the geotechnical design and construction of levees.
To be independently selected	Hydrology and Hydraulics, P.E.	BS in Civil/Hydraulic Engineering, 20+ years experience in hydrology and hydraulic design.
To be independently selected	Structural, P.E.	BS in Structural Engineering, 20+ years experience in the structural design and construction of levee enclosure structures.

Attachment 3 Completion of Agency Technical Review

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *Section 14* for *Highway 58 Bridge, White River, Guion. Arkansas*. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks[sm].

Saji Varghese
Draft Feasibility Report and Environmental Assessment
CESWD-PDP

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE _____ _____

Saji Varghese Date
Draft Feasibility Report and Environmental Assessment
CESWD-PDP

Attachment 4 Review Plans Revisions

Revision Date	Description of Change	Page / Paragraph Number
19 July 2011	Addition of feasibility phase and plans and specs ATR Info	Page 12, paragraph 10.a
19 July 2011	Revision of ATR signatures	Page 17 & 18
19 July 2011	Addition of Attachment 6: Implementation Schedule	Page 23
19 July 2011	Revision of Study Risk and Consequences Matrix	Page 16

Attachment 5 Acronyms and Abbreviations

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CAP	Continuing Authorities Program	O&M	Operation and maintenance
CSDR	Coastal Storm Damage Reduction	OMB	Office and Management and Budget
DPR	Detailed Project Report	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DQC	District Quality Control/Quality Assurance	OEO	Outside Eligible Organization
DX	Directory of Expertise	OSE	Other Social Effects
EA	Environmental Assessment	PCX	Planning Center of Expertise
EC	Engineer Circular	PDT	Project Delivery Team
EIS	Environmental Impact Statement	PAC	Post Authorization Change
EO	Executive Order	PMP	Project Management Plan
ER	Ecosystem Restoration	PL	Public Law
FDR	Flood Damage Reduction	QMP	Quality Management Plan
FEMA	Federal Emergency Management Agency	QA	Quality Assurance
FRM	Flood Risk Management	QC	Quality Control
FSM	Feasibility Scoping Meeting	RED	Regional Economic Development
GRR	General Reevaluation Report	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act

Attachment 6 Implementation Schedule

Project approval and a commitment of Federal funds for construction have been requested. Once received, the PPA will be executed, followed by advertising and awarding a contract. Listed below are the major project milestones and their expected completion dates.

- Complete plans and specifications package July 19, 2011
- Receive Project Approval & Commitment of Federal Construction Funds - **July 28, 2011**
- Sign PPA and request sponsor's funds and real estate – July 29, 2011
- ATR and BCO Review of plans and specs – August 11, 2011
- Advertise – September 16, 2011
- Bid Opening – October 17, 2011
- Receive sponsor's real estate – October 28, 2011
- Contract Award – **October 31, 2011**