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CORPS OF ENGINEERS, NORTHWESTERN DIVISION
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CENWD-RBT

14 DEC 2012

MEMORANDUM FOR Commander, Kansas City District

SUBJECT: Review Plan (RP) Approval for Chariton River Watershed Ecosystem Restoration, Clarke, Lucas and Wayne Counties, Iowa - Section 206 Definite Project Report

1. References:

a. RP for Chariton River Watershed Ecosystem Restoration, Clarke, Lucas, and Wayne Counties, Iowa, 4 December 2012 (Encl).

b. EC 1165-2-209 Change 1, Civil Works Review Policy, 31 January 2012.

2. Reference 1.a. above has been prepared in accordance with reference 1.b. above.

3. The RP has been coordinated with the Business Technical Division, Northwestern Division, U.S. Army Corps of Engineers, which is the lead office and point of contact to execute this plan. The Review Plan includes District Quality Control and Agency Technical Review and has been coordinated with Business Technical Division as the Review Management Office (RMO). The RMO Point of Contact is Steve Bredthauer, 503-808-4053.

4. I hereby approve this RP, which is subject to change as circumstances require, consistent with the study development process and the Project Management Business Process. Subsequent revisions to this RP or its execution will require written approval from this office.

5. For further information, please contact Mr. Jeremy Weber at (503) 808-3858.

Encl


ANTHONY C. FUNKHOUSER, P.E.
COL, EN
Commanding

CF: CENWD-PDD

REVIEW PLAN
USING THE MODEL REVIEW PLAN
for
Continuing Authorities Program (CAP)
Section 206 of the Water Resources Development Act (WRDA) of 1996

Chariton River Watershed Ecosystem Restoration
Clarke, Lucas, and Wayne Counties, Iowa

Section 206 Definite Project Report (DPR)

Kansas City District

4 Dec 2012

MSC Approval Date: Pending

Last Revision Date: None

P2 No. 107029



**US Army Corps
of Engineers ®**

**REVIEW PLAN
USING THE MODEL REVIEW PLAN**

**Chariton River Watershed Ecosystem Restoration
Clarke, Lucas, and Wayne Counties, Iowa
Section 206 DPR**

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1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the Chariton River Watershed Ecosystem Restoration, Section 206 project.

Section 206 of the Water Resources Development Act of 1996, Public Law 104-305, authorizes the Secretary of the Army to carry out a program of aquatic ecosystem restoration with the objective of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition considering the ecosystem's natural integrity, productivity, stability and biological diversity. This authority is primarily used for manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. This authority also allows for dam removal. 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.

Additional Information on this program can be found in Engineering Regulation 1105-2-100, Planning Guidance Notebook, Appendix F Amendment #2.

- b. **Applicability.** This review plan is based on the Model Review Plan for Section 14, 107, 111, 204, 206, 208, 1135 program projects directed by USACE guidance to follow CAP procedures, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in EC 1165-2-209 Civil Works Review Policy.

c. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Model Certification, 31 May 2005
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) Continuing Authority Program Planning Process Improvements, Director of Civil Works' Policy Memorandum #1, 19 Jan 2011
- (7) Chariton River Watershed Ecosystem Restoration Project Management Plan revised November 11, 2013.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

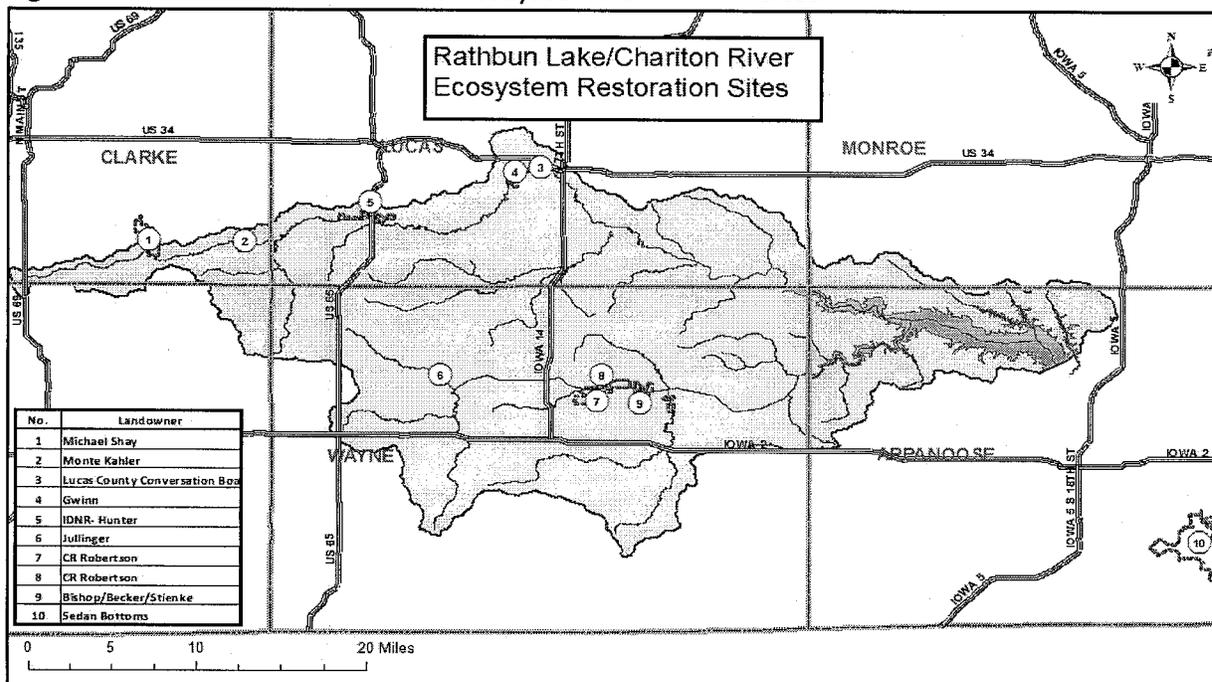
The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for Section 206 projects is the home MSC, Northwestern Division (NWD). NWD will coordinate and approve the review plan and supervise the Agency Technical Review (ATR). The home District will post the approved review plan on its public website and provide the appropriate NWD District Support Planner with the link. PDT, DQC, and ATR rosters are provided as Attachment 1.

3. PROJECT INFORMATION

- a. **Decision Document.** The Chariton River Watershed Ecosystem Restoration Definite Project Report (DPR) will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of the decision document is NWD. An Environmental Assessment (EA) will be prepared along with the decision document.
- b. **Study/Project Description.** By 1990, the state of Iowa had lost 98% of its wetlands and ranked third in overall percentage of wetland loss within the conterminous U.S. The Iowa Department of Natural Resources (IDNR) and other local, state and Federal agencies have been very active in recent years in the restoration of wetlands, bottomland hardwoods, riparian, and other habitat types within the Chariton River Watershed.

Sites proposed for restoration were selected using the following criteria not necessarily in order of priority: sediment delivery rates, landowner participation and land availability, existing habitat, relative disturbance, proximity to important natural areas, existing habitat adjacency, adequate area for diverse habitat restoration, distance from Rathbun Lake, existing restoration/land treatment measures in place, presence of threatened and endangered species, cultural resources, and HTRW considerations if any. Out of 54 initial areas screened for restoration, 10 areas were brought forth for field study and ecological site characterization (Figure 1). Restoration measures basically include, but are not limited to wetland, bottomland hardwood, and riparian restoration through grading and hydraulic reconnection, exotic plant removal and native plantings. The IDNR as the non-Federal project sponsor will assist in the formulation, screening, evaluation and determination of the sites selected for restoration. No policy waivers are anticipated for this project.

Figure 1. Chariton River Watershed Ecosystem Restoration Sites



- c. **In-Kind Contributions.** The non-Federal sponsor may provide the seeding of restored areas.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. The home district shall manage DQC.

5. AGENCY TECHNICAL REVIEW (ATR)

One ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.), however additional ATRs may be performed if deemed warranted. 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. On this project the ATR team lead will be from outside of NWD.

- 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 signing of the final report. Products requiring ATR include but are not limited to: draft EA and draft DPR.
- b. **Required ATR Team Expertise.** The ATR Team will be composed of approximately eight reviewers and one ATR team lead. The RMO, in cooperation with the PDT and vertical team, will determine the final make-up of the ATR team. The ATR team members should preferably have a minimum of 10 years of experience and be familiar with ecosystem restoration studies.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional preferably with experience in preparing Section 1135 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 in this case will be from outside <i>Northwestern Division</i>
Planning	The Planning reviewer should be a senior water resources planner with experience in ecosystem restoration projects under CAP authority as well as experience with CE/ICA.
Economics	The economics reviewer will have a thorough understanding of ecosystem restoration studies and CE/ICA.
Environmental Resources	The environmental resources reviewer should have a strong understanding of ecosystem restoration studies and NEPA compliance. Additionally, the reviewer should have an understanding of HEP/HSI models to complete a review of the environmental benefits model used for this study.
Hydrology and Hydraulic Engineering	The hydraulic engineer will have an understanding of ecosystem restoration projects as well as sediment movement and channel morphology.

Geotechnical Engineering	The geotechnical engineering reviewer will have experience in determining rock gradation, geometry of wetland structures, rock armoring and emergency spillway protection.
Civil Engineering	The civil engineer reviewer will have a thorough understanding of civil, utilities and site aspects of environmental restoration design.
Cost Engineering	The cost engineer should have experience preparing cost estimates for ecosystem restoration projects and using MCASES software.
Real Estate	The real estate reviewer will have a thorough understanding of easements, right of ways, and land acquisition in civil works.

- c. **Charge Document.** The district will prepare the charge document which clearly identifies the review requirements. This document must be completed prior to requesting an ATR team.
- d. **Documentation of ATR.** *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. *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.

6. 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.

7. COST ENGINEERING TECHNICAL CENTER OF EXPERTISE (TCX) REVIEW AND CERTIFICATION

For CAP projects, ATR of the costs may be conducted by pre-certified district cost personnel within the region, or by the Walla Walla Cost TCX. The pre-certified list of cost personnel has been established and is maintained by the Cost TCX. The cost ATR member will coordinate with the Cost TCX for execution of cost ATR and cost certification. The Cost TCX will be responsible for final cost certification and may be delegated at the discretion of the Cost TCX. The cost estimates will be prepared in accordance with and reviewed for compliance with ER 1110-1-1300, Cost Engineering Policy and General Requirements, guidance / procedures applicable to CAP projects as provided at the Cost TCX Web Page <http://www.nww.usace.army.mil/Missions/CostEngineering.aspx>, and other applicable references.

- c. **Model Certification/Approval Schedule and Cost.** For decision documents prepared under the model National Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-407 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.

10. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this review plan as technical partner agencies or in a review capacity as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. An opportunity for public comment will be scheduled and afforded following the Alternatives Formulation Briefing (AFB) which includes finalization of draft alternatives and tentative plan selection. The ATR team will be provided copies of public and agency comments after compiling the comments following the public meeting. The final decision document will be available to the public by placement on the NWK project website, and providing copies to the Rathbun Lake Project Office, local libraries, agencies and other outlet sources if and as appropriate.

11. REVIEW PLAN APPROVAL AND UPDATES

The NWD Commander will be required to approve the review plan, ensuring appropriate use of the approved Model Review Plan. The review plan is a living document and may change as the study progresses. The Kansas City District is responsible for keeping the review plan up to date. Minor changes to the review plan after NWD approval will be documented in attachments and will not require submission to NWD for approval. Significant changes to the review plan (such as changes to the scope and/or level of review) should be submitted for approval by the NWD Commander. Significant changes in scope could result in NWD determining that use of the NWD Model Review Plan is no longer appropriate. In these cases, a project specific review plan may be required in accordance with EC 1165-2-209. The latest version of the review plan, along with the NWD approval memorandum, will be posted on the home district's webpage. Changes will be entered and tracked per "ATTACHMENT 3: REVIEW PLAN REVISIONS" tracking table.

12. REVIEW PLAN POINTS OF CONTACT

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

- Richard Skinker, richard.a.skinker@usace.army.mil, 816-389-3134
- John Grothaus, john.j.grothaus@usace.army.mil, 816-389-3110
- Jeremy Weber, Jeremy.j.weber@usace.army.mil, 503-808-3858

ATTACHMENT 1: TEAM ROSTERS

PDT

Discipline	Name	Office Symbol/Agency	Telephone Number
Project Manager	Richard Skinker	PM-PF	816-389-3134
Environmental Resources Specialist	Jesse Granet	PM-PR	816-389-3470
Cultural Resources	Tim Meade	PM-PR	816-389-3138
Civil Engineer	Cassidy Garden	ED-GC	816-389-3851
Hydraulic Engineer	Ed Parker	ED-HC	816-389-3145
Geotechnical Engineer	Scott Loehr	ED-GD	816-389-3601
Real Estate	Ali Marold	RE-C	816-389-3712
Cost Estimator	John Giacomo	ED-DC	816-389-3228
Economist	Thomas Topi	PM-PF	816-389-3061
Budget Analyst	Theresa Schreckler	PM-CG	816-389-3779
Contracting Specialist	John Akin	CT-C	816-389-3665

DQC

Discipline	Name	Office Symbol/Agency	Telephone Number
Plan Formulation	John Grothaus	PM-PF	816-389-3110
Environmental Resources Specialist	Glenn Covington	PM-PR	816-389-3141
Civil Engineer	Craig Weltig	ED-GC	816-389-3851
Hydraulic Engineer	William Otero	ED-HC	816-389-3727
Geotechnical Engineer	Glen Bellew	ED-GD	816-389-3553
Real Estate	Patty Richardson	RE-C	816-389-3744
Cost Estimator	Pat Miramontez	ED-DC	816-389-3322
Economist	Al Holland	PM-PF	816-389-3105

ATR

Discipline	Name	Office Symbol/Agency	Telephone Number
ATR Lead & Plan Formulation	Edwin Rossman	SWT-PE-P	918-669-4921
Environmental Resources Specialist	Patricia Newell	SWT-PE-P	918-669-4937
Civil Engineer	Jay Johnson	SWT-EC-DC	918-669-7055
Hydraulic Engineer	Tyler Gipson	SWT-EC-HM	918-669-7141
Geotechnical Engineer	Cory Williams	MVM	901-544-3291
Real Estate	Douglas Young	MVM	901-544-3154
Cost Estimator	Jim Neubaer	CENWW-EC-X	509-527-7332
Economist	Glenn Fulton	SWT-PE-P	918-669-7453

ATTACHMENT 2: STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *Section 206 CAP study* for Chariton River Watershed Ecosystem Restoration, Clarke, Lucas, and Wayne Counties, Iowa. 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™.

Edwin Rossman
ATR Team Leader
CESWT-PE-P

Date

Richard Skinker
Project Manager
CENWK-PM-PF

Date

Jeremy Weber
Review Management Office Representative
CENWD-PDD

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.

John J. Grothaus
Continuing Authorities Program Manager
CENWK-PM-P

Date

Jennifer L. Switzer
Chief, Planning Branch
CENWK-PM-P

Date

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NER	National Ecosystem Restoration
ASA(CW)	Assistant Secretary of the Army for Civil Works	NEPA	National Environmental Policy Act
ATR	Agency Technical Review	NHPA	National Historic Preservation Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
CWA	Clean Water Act	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	Engineer Regulation	PL	Public Law
FDR	Flood Damage Reduction	POH	U.S. Army Corps of Engineers, Honolulu District
FEMA	Federal Emergency Management Agency	POD	U.S. Army Corps of Engineers, Pacific Ocean Division
FRM	Flood Risk Management	QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
HEP	Habitat Equivalency Protocol	RED	Regional Economic Development
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMC	Risk Management Center
IEPR	Independent External Peer Review	RMO	Review Management Organization
ITR	Independent Technical Review	RTS	Regional Technical Specialist
IWR	Institute of Water Resources	SAR	Safety Assurance Review
MSC	Major Subordinate Command	USACE	U.S. Army Corps of Engineers
NED	National Economic Development	WRDA	Water Resources Development Act