



DEPARTMENT OF THE ARMY
MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

10 DEC 2013

CEMVD-PD-SP

MEMORANDUM FOR Commander, Rock Island District

SUBJECT: Review Plan (RP) Approval for Freeborn County, Illinois,
Section 206 - Ecosystem Restoration Project

1. References:

a. Memorandum, CEMVR-PM-M, 15 November 2013, subject: MVD Continuing Authorities Program (CAP) Model Review Plan (RP) and MVD CAP Model RP Checklist for the Section 206 Freeborn County Ecosystem Restoration Project (encls 1 and 2).

b. Memorandum, CEMVD-RB-T, 26 November 2013, subject as shown above in reference 1.a (encl 3).

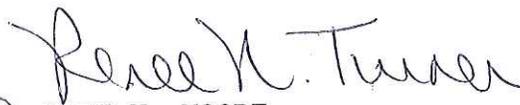
c. EC 1165-2-214, CECW, 15 December 2012, subject: Civil Works Review Policy.

2. The enclosed Review Plan is a combined decision document and implementation document review plan. It includes the MVD Review Plan Checklist for CAP and has been prepared in accordance with EC 1165-2-214. The RP has been coordinated between the Upper District Support Team and the Business Technical Division, who concurred with the plan in reference 1.b. of the enclosed memorandum.

3. I hereby approve this RP, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this RP or its execution will require new written approval from this office. Non-substantive changes to this RP do not require further approval. The District should post the approved RP to its web site.

4. The MVD point of contact for this action is Mr. Gabe Harris, CEMVD-PD-SP, (601) 634-5926.

3 Encls


MARK W. MOORE

Chief, Upper District Support Team,
St. Louis, Rock Island, St. Paul



REPLY TO
ATTENTION OF

CEMVR-PM-M

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

NOV 15 2013

MEMORANDUM FOR Commander, US Army Corps of Engineers, Mississippi Valley Division (CEMVD-PD-SP/Harris), PO Box 80, 1400 Walnut Street, Vicksburg, Mississippi 39181-0080

SUBJECT: MVD Continuing Authorities Program (CAP) Model Review Plan (RP) and MVD CAP Model RP Checklist for the Section 206 Freeborn County Ecosystem Restoration Project

1. The Subject RP (Encl 1) and Model RP Checklist (Encl 2) for the Section 206 Freeborn County Ecosystem Restoration Project are submitted for your review and approval. An electronic copy of the Subject RP and enclosures have been sent to Mr. Gabe Harris, CEMVD-PD-SP.

2. The point of contact for this project is Mr. Andrew Leichty, Program Manager, at (309) 794-5399 or e-mail: andrew.l.leichty@usace.army.mil.

For Mark J. Deschenes

Encl
as

Mark J. Deschenes
Colonel, US Army
Commander & District Engineer

ENCL 1

Attachment 1: Sample Statement of Technical Review for Decision & Implementation Documents

Completion of Agency Technical Review

The Agency Technical Review (ATR) has been completed for the Project Feasibility Report, Environmental Assessment, Preliminary Design Documents, and Cost Estimate for the Freeborn County Section 206 Ecosystem Restoration Project. 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 DrCheckssm.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

_____ Date

SIGNATURE

Name

Project Manager (home district)

Office Symbol

_____ Date

SIGNATURE

Name

Architect Engineer Project Manager¹

Company, location

_____ Date

SIGNATURE

Name

Review Management Office Representative

Office Symbol

_____ 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

Name

Chief, Engineering Division (home district)

Office Symbol

_____ Date

SIGNATURE

Name

Chief, Planning Division (home district)

Office Symbol

_____ Date

¹ Only needed if some portion of the ATR was contracted.

MVD CAP Review Plan Checklist

| | |
|--|--|
| Date: | 14 November 2013 |
| Originating District: | Rock Island District (MVR) |
| Project/Study Title: | Freeborn County Ecosystem Restoration Review Plan |
| P2# and AMSCO#: | P2 #115676; AMSCO # 173832 |
| District POC: | Sierra Keenan, Study Planner MVP, Andrew Leichty, CAP Program Manager MVR |
| MSC Reviewer: | |
| CAP Authority: | CAP 206 |
| Other Program Directed to follow CAP Processes: | |

Please fill out this checklist and submit with the draft Review Plan when coordinating with the MSC. Any evaluation boxes checked “No” may indicate the project may not be able to use the MVD Model Review Plan. Further explanation may be needed or a project specific review plan may be required. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan. Checklist may be limited to Section I or Section II or Both, depending on content of review plan (or subsequent amendments).

Section I - Decision Documents

| REQUIREMENT | EVALUATION |
|--|---|
| 1. Is the Review Plan (RP) for a Continuing Authorities Project? Or Other Program Directed to follow CAP Processes? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |
| a. Does it include a cover page identifying it as following the Model RP and listing the project/study title, originating district or office, and date of the plan? | a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| b. Does it include a table of contents? | b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| c. Is the purpose of the RP clearly stated? | c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| d. Does it reference the Project Management Plan (PMP) of which the RP is a component? | d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| e. Does it succinctly describe the levels of review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR) if applicable for Sec 103 or Sec 205? | e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed? | f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| g. Does it list the names and disciplines of the Project Delivery Team (PDT)?* | g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p> <p>Comments:</p> | |

Freeborn County Section 206 Ecosystem Restoration Project

| | |
|---|---|
| <p>2. Is the RP detailed enough to assess the necessary level and focus of the reviews?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>3. Does the RP define the appropriate level of review for the project/study?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>a. Does it state that DQC will be managed by the home district in accordance with the MVD and district Quality Management Plans?</p> <p>b. Does it state that ATR will be managed by MVD?</p> <p>c. Does it state whether IEPR will be performed? For Sec 103 and Sec 205, see additional questions in 5. below.</p> <p>Comments:</p> | <p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>4. Does the RP explain how ATR will be accomplished?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that ATR team members will be from outside the home district?</p> <p>d. Does it indicate where the ATR team leader will be from?</p> <p>e. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*</p> <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p> <p>Comments: The RP describes the needed qualifications and expertise of the ATR Reviewers. However reviewers have not been listed by name. Once the RMO assigns ATR reviewers to the project MVR will update the RP to include ATR names.</p> | <p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input type="checkbox"/> No <input type="checkbox"/></p> |
| <p>5. For Sec 103 and Sec 205 projects, does the RP explain how IEPR will be accomplished?</p> | <p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> |
| <p>a. Is an exclusion being requested, requiring CG approval?</p> <p>b. Does it provide a defensible rationale for the decision on IEPR?</p> <p>c. If IEPR is required, does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?</p> <p>d. If IEPR is required, does the RP indicate which PCX will manage the IEPR and whether any coordination with the PCX has occurred?</p> <p>Comments:</p> | <p>a. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/></p> |
| <p>6. Does the RP address review of sponsor in-kind contributions?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |

Freeborn County Section 206 Ecosystem Restoration Project

| | |
|---|--|
| <p><u>The non-Federal sponsor will contribute study coordination as an in-kind service during the feasibility phase; up to \$5000 will be credited for this service</u></p> | |
| <p>7. Does the RP address how the review will be documented?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>a. Does the RP address the requirement to document ATR and IEPR comments using Dr Checks?</p> <p>b. Does the RP explain how the IEPR will be documented in a Review Report?</p> <p>c. Does the RP document how written responses to the IEPR Review Report will be prepared?</p> <p>c. Does the RP detail how the district will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p> <p>Comments:</p> | <p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> |
| <p>8. Does the RP address Policy Compliance and Legal Review?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>a. Does it provide a schedule for ATR including review of the Alternative Formulation Briefing (AFB) materials and final report?</p> <p>b. Does it present the timing and sequencing for IEPR?</p> <p>c. Does it include cost estimates for the reviews?</p> | <p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>10. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include:</p> <ul style="list-style-type: none"> ● Where failure leads to significant threat to human life ● Novel methods\complexity\ precedent-setting models\policy changing conclusions ● Innovative materials or techniques ● Design lacks redundancy, resiliency of robustness ● Unique construction sequence or acquisition plans ● Reduced\overlapping design construction schedule | <p>Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p>Comments:</p> |
| <p>11. Does the RP address opportunities for public participation?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>12. Does the RP indicate ATR of cost estimates will be conducted by pre-certified district cost personnel who will coordinate with the Walla Walla Cost DX?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>13. Has the approval memorandum been prepared and does it accompany the RP?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |

Freeborn County Section 206 Ecosystem Restoration Project

Section II - Implementation Documents

Please fill out this checklist and submit with the draft Review Plan or subsequent Review Plan amendments when coordinating with the MSC. For DQC, the District is the RMO; for ATR and Type II IEPR, MVD is the RMO. Any evaluation boxes checked “No” indicate the RP possibly may not comply with MVD Model Review Plan and should be explained. Additional coordination and issue resolution may be required prior to MVD approval of the Review Plan.

| REQUIREMENT | EVALUATION |
|--|--|
| 1. Are the implementation documents/products described in the review or subsequent amendments? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 2. Does the RP contain documentation of risk-informed decisions on which levels of review are appropriate? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 3. Does the RP present the tasks, timing, and sequence of the reviews (including deferrals)? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| a. Does it provide an overall review schedule that shows timing and sequence of all reviews? b. Does the review plan establish a milestone schedule aligned with the critical features of the project design and construction? | a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Referenced in the PMP |
| 4. Does the RP address engineering model review requirements? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| a. Does it list the models and data anticipated to be used in developing recommendations? b. Does the RP identify any areas of risk and uncertainty associated with the use of the proposed models? N/A c. Does it indicate the certification/approval status of those models and if review of any model(s) will be needed? d. If needed, does the RP propose the appropriate level of review for the model(s) and how it will be accomplished? N/A | a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Yes <input type="checkbox"/> No <input type="checkbox"/> c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> d. Yes <input type="checkbox"/> No <input type="checkbox"/> |
| 5. Does the RP explain how and when there will be opportunities for the public to comment on the study or project to be reviewed? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 6. Does the RP address expected in-kind contributions to be provided by the sponsor? No in-kind contributions are involved. If expected in-kind contributions are to be provided by the sponsor, does the RP list the expected in-kind contributions to be provided by the sponsor? N/A | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> |

Freeborn County Section 206 Ecosystem Restoration Project

| | |
|--|--|
| <p>7. Does the RP explain how the reviews will be documented?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p>a. Does the RP address the requirement to document ATR comments using Dr Checks and Type II IEPR published comments and responses pertaining to the design and construction activities summarized in a report reviewed and approved by the MSC and posted on the home district website?</p> <p>b. Does the RP explain how the Type II IEPR will be documented in a Review Report? <i>N/A</i></p> <p>c. Does the RP document how written responses to the Type II IEPR Review Report will be prepared? <i>N/A</i></p> <p>d. Does the RP detail how the district/MVD will disseminate the final Type II IEPR Review Report, USACE response, and all other materials related to the Type II IEPR on the internet? <i>N/A</i></p> | <p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input type="checkbox"/> No <input type="checkbox"/></p> |
| <p>8. Has the approval memorandum been prepared and does it accompany the RP?</p> | <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |

REVIEW PLAN
Using the MVD Model Review Plan
for
Continuing Authorities Program
Section 14, 107, 111, 204, 206, 208, or 1135 Projects,
or Projects directed by Guidance
to use CAP processes

Freeborn County Ecosystem Restoration Project
Freeborn County, Minnesota
Section 206 Project

Rock Island District

MSC Approval Date: "Pending"
Last Revision Date: 2013-11-18



**US Army Corps
of Engineers ®**

**Review Plan
Using the MVD Model Review Plan**

Freeborn County Ecosystem Restoration Project
Freeborn County, Minnesota
Section <206> Project

TABLE OF CONTENTS

| | |
|---|-----|
| 1. Purpose and Requirements | 1 |
| 2. Review Management Organization (RMO) Coordination | 2 |
| 3. Project Information | 2 |
| 4. District Quality Control (DQC) | 4 |
| 5. Agency Technical Review (Atr) | 5 |
| 6. Policy and Legal Compliance Review | 6 |
| 7. Cost Engineering Directory of Expertise (DX) Review and Certification | 6 |
| 8. Model Certification and Approval | 6 |
| 9. Review Schedules and Costs | 7 |
| 10. Public Participation | 8 |
| 11. Review Plan Approval and Updates | 8 |
| 12. Review Plan Points of Contact | 9 |
| Attachment 1: Team Rosters | 10 |
| Attachment 2: Review Plan Revisions | 131 |

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

1. Purpose and Requirements.

a. Purpose. This Review Plan defines the scope and level of peer review for the Freeborn County Section 206 Ecosystem Restoration Project, Section 206 Project products. Decision document products included for review are the project feasibility report, an environmental and cultural assessment, cost estimate, hydraulic and hydrologic analysis, geotechnical analysis and the real estate plan. Implementation products include bidding documents (plans and specifications), project operations and maintenance (O&M) documents, and the project Design Documentation Report (DDR).

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. This is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Unlike the traditional Corps' civil works projects that are of wider scope and complexity, 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 MVD Model Review Plan for Section 14, 107, 111, 204, 206, 208, or 1135 Projects or Programs directed by guidance to follow CAP processes, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined by the mandatory Type I IEPR triggers contained in EC 1165-2-214, Civil Works Review Policy.

c. References:

- (1) Engineering Circular (EC) 1165-2-214, Civil Works Review Policy, 31 January 2010.
- (2) Director of Civil Works' Policy Memorandum #1, CECW-P, dated 19 January 2011.
- (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2010.
- (4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 September 2006.
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 January 2007.
- (6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 November 2007.
- (7) Project Management Plan (PMP) for study

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

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 is MVD. MVD will coordinate and approve the review plan and manage the Agency Technical Review (ATR). The home District will post the approved review plan on its public website.

3. Project Information.

a. Decision and Implementation Documents. The Section 206 – Freeborn County Ecosystem Restoration Project decision document will be prepared in accordance with ER 1105-2-100, Appendix F, Amendment #2. The approval level of the decision document (if policy compliant) is MVD. An Environmental Assessment (EA) will be prepared along with the decision document. Project Plans and Specifications (P&S) will also be prepared for implementation of the project and will undergo ATR review.

b. Study/Project Description. Freeborn County, in southern Minnesota, contains the headwaters of the Shell Rock River (Figure 1). The county seat, Albert Lea, is located along I-35 just south of I-90, approximately 100 miles south of Minneapolis and 150 miles north of Des Moines, Iowa. The Shell Rock River flows south from an outlet at Albert Lea Lake and empties into the Cedar River at Shell Rock, Iowa. The Albert Lea Lake watershed, which serves as the headwaters of the Shell Rock River, is approximately 246 square miles (157,000 acres) in size and includes the cities of Albert Lea and Hayward, Minnesota, and surrounding agricultural land. A low-head dam with a concrete spillway currently serves as the outlet of Albert Lea Lake into the Shell Rock River. The watershed is entirely located within Freeborn County. The Shell Rock Watershed District is the non-Federal sponsor for this study.

Urbanization and increasingly intensive agriculture in the watershed have degraded the aquatic habitat of Fountain Lake, Albert Lea Lake, and the Shell Rock River through sedimentation and water level fluctuations that reduce the ability of native plants and animals to utilize historic habitat within the watershed. This has occurred due to elimination of historic wetlands, channelization of streams, and an increase in storm water runoff that has led to increased sediment yields. The goal of this project is to restore wetland and aquatic habitat within the Shell Rock River watershed by addressing the primary problems of sedimentation and water level fluctuation within Fountain and Albert Lea Lakes and the Shell Rock River.

Approximately 120 acres of wetlands would be created within the Shell Rock River watershed, approximately 5 acres of deepwater habitat would be created within Albert Lea Lake for overwintering fish and the entire 2,600 acre Albert Lea Lake would be enhanced through reduced water level fluctuations, reduced erosion and sedimentation, and reduced turbidity. Fountain Lake and the Shell Rock River would also benefit from reduced sediment inputs from the watershed, although the scope of this project would likely not restore these water bodies to a significant extent.

A total of approximately 2,720 acres of wetlands and lake habitat is proposed to be restored through implementation of this project, at a total cost of \$7,486,000. This comes out to a unit cost of approximately \$2,800 per acre. This acreage does not include Fountain Lake or the Shell Rock River, which would receive ancillary benefits from implementation of the project.

Potential project measures have been identified through information gathered during planning meetings and the six-step planning process. A list of potential measures and alternatives for further consideration and possible inclusion in the recommended project is included below.

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

- “No Action” This alternative takes no action. Existing degraded conditions and natural resource issues are not addressed.

- Shell Rock Headwaters
 - Wetland Restoration
 - Stream Re-meandering
 - Forest Planting

- Water Level & Sediment Management in Albert Lea Lake
 - Water control/drawdowns
 - Shoreline stabilization

- Fish Passage
 - Rock ramp
 - Bypass channel
 - Dam removal

- Rough Fish Control
 - Chemical control
 - Williams cage
 - Electric barrier

- Dredging and placement
 - Shell Rock Headwaters islands/wetlands
 - Albert Lea Lake islands/wetlands

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

- The project/study is not likely to have significant interagency interest; it is not anticipated to be controversial nor result in significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project.
- The project/study will not be highly controversial;
- The anticipated project design will take advantage of prevailing practices and methodologies. The information in the decision document or proposed project design will not likely 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;
- The project design is not likely to contain influential scientific information, not is it likely to be a highly influential scientific assessment;
- The project is expected to have a total project cost of approximately \$7.5 million which is less than \$45 million.

d. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to District Quality Control (DQC) and ATR, similar to any products developed by USACE. The non-Federal sponsor will contribute study coordination as an in-kind service during the feasibility phase; up to \$5000 will be credited for this service. The non-Federal sponsor's Study Coordination Team activities will consist of planning support, meeting preparation and attendance related to the Freeborn Project. At this time it is not anticipated that the sponsor will provide any in kind services during the implementation phase. However, if any In kind services are provided they will be defined in the PPA.

4. District Quality Control (DQC).

All decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. 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 in accordance with MVD and district Quality Management Plan. Any discrepancies between a reviewer and a Project Delivery Team (PDT) member will be resolved face-to-face. If a concern cannot be satisfactorily resolved between the DQC team and the PDT, it will be elevated to the section supervisor for further resolution.

DQC will be performed by members of the same discipline within the district and in most cases will be reviewed by the PDT member's immediate supervisor.

a. Feasibility Phase. Technical supervisors will assure that experienced personnel, who have been involved with similar work, check team members' technical work for completeness, accuracy and clarity. The DQC of the feasibility portion of the project will be documented in DrChecks. At a minimum all reviews shall place a comment in DrChecks that states they have performed the review and all comments have been adequately addressed. Any major comment regarding the documents shall also be placed in DrChecks. Comments minor in nature can be provided to the PDT and address outside of DrChecks. A District Quality Control Review (DQCR) will be conducted prior to ATR. The ATR team will be provided a summary of the DQCR comments and evaluations from DrChecks.

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

b. Plans and Specifications Phase. The DQC consists of at least one technical check; a DQCR; and a Biddability, Constructability, Operability, Environmental (BCOE) Review. DQRC will be conducted at the 95 percent design level prior to ATR. Review comments and resolutions will be entered into DrChecks, in accordance with ER 1110-1-8159. The review will be documented by a completed (signed) Statement of Technical Review and Certification, to which all review comments and resolutions will be attached.

BCOE occurs in the plans and specifications phase of the project. In accordance with ER 415-1-11, the Project Engineer will conduct a BCOE review at the final design level, after all ATR comments have been resolved and incorporated. The review documents will include a complete drawing set, complete specifications (with special clauses), and Engineering Considerations. The review will commence at least 30 days prior to advertisement. Review comments and resolutions will be entered into DrChecks. The BCOE review will be documented by a completed (signed) BCOE certification, to which all review comments and resolutions will be attached.

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 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. 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. The ATR team lead will be from within the home MSC.

a. Products to Undergo ATR. ATR will be performed throughout the project in accordance with the District and MVD Quality Management Plans. Products to undergo ATR include: [the feasibility study draft decision and NEPA documents and implementation documents \(P&S\)](#). ATR will be scalable, and as needed may be performed for the final decision and NEPA documents.

b. Required ATR Team Expertise. The expertise represented on the ATR team reflected the significant expertise involved in the work effort and generally mirrors the expertise on the PDT. Section 206 Projects, typically includes, Plan Formulation, Biology/NEPA/Ecosystem Output Evaluation, Engineering/Hydraulics and Hydrology, Real Estate, Economics (CE/ICA) and Cost Estimating represented on the ATR Teams. The ATR Team Leader role can be assigned to any of the ATR team members. An ATR Team member may serve multiple roles if the scope of the study and the level of effort warrant. The ATR Team Leader follows the requirements as outlined in the "ATR Lead Checklist" developed by the National Planning Centers of Expertise. The following table provides a list of disciplines included on the ATR team and descriptions of the expertise required:

| ATR Team Members/Disciplines | Expertise Required |
|-------------------------------------|--|
| ATR Lead | <u>A senior professional with experience in preparing Section 206 decision documents and conducting ATR. The lead demonstrates the necessary skills and experience to lead a virtual team through the ATR process.</u> |
| Planning | <u>The Planning reviewer should be a senior water resources planner with experience in ecosystem restoration and general planning policy.</u> |
| Environmental Resources | <u>A senior biologist with experience in ecosystem restoration, NEPA compliance and CE/ICA through IWR Plan software.</u> |

REVIEW PLAN
Freeborn County Section 206 Ecosystem Restoration Project

| | |
|--------------------------|--|
| Hydrology and Hydraulics | <u>An expert in the field of hydraulics and hydrology with a thorough understanding of knowledge of open channel dynamics, application of detention/retention basins, and ecosystem restoration.</u> |
| Geotechnical Engineering | <u>A senior geotechnical engineer with experience in ecosystem restoration.</u> |
| Civil Engineering | <u>A senior civil engineer with experience in ecosystem restoration.</u> |
| Structural Engineering | <u>A senior structural engineer with experience in ecosystem restoration.</u> |
| Cost Engineering | <u>Cost DX Staff or Cost DX Pre-Certified Professional with experience preparing cost estimates for ecosystem restoration.</u> |
| Real Estate | <u>An expert in real estate acquisition and appraisal.</u> |

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. Any editorial comments should be provided informally by email to the PDT.

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 MVD 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 Directory of Expertise (DX) 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 DX. The pre-certified list of cost personnel has been established and is maintained by the Cost DX at <https://kme.usace.army.mil/EC/cost/CostAtr/default.aspx>. The cost ATR member will coordinate with the Cost DX for execution of cost ATR and cost certification. The Cost DX will be responsible for final cost certification and may be delegated at the discretion of the Cost DX.

8. Model Certification And Approval.

Approval of planning models under EC 1105-2-412 is not required for CAP projects. MSC commanders remain responsible for assuring the quality of the analyses used in these projects. ATR will be used to ensure that models and analyses 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.

EC 1105-2-412 does not cover engineering models used in planning. 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

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

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, ATR, and IEPR (if required).

Planning and Engineering Models. The following 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 |
|---|---|
| <u>HEC-RAS 4.0 (River Analysis System)</u> | <u>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 was be used for steady flow analysis to evaluate the future without- and with-project conditions within the impoundment to provide data for the HEP analysis.</u> |
| <u>Habitat Evaluation Procedure (HEP)/Habitat Suitability Index (HSI)</u> | <u>Evaluates existing, future without-project and future with-project ecosystem conditions. Serves as the basis for ecosystem assessment and effectiveness of alternative plans.</u> |
| <u>IWR-Plan</u> | <u>USACE cost-effectiveness and incremental cost analysis software; utilized in the formulation, evaluation and comparison of alternative plans.</u> |

9. Review Schedules And Costs.

ATR Schedule and Cost.

a. Feasibility. The ATR review will begin with the AFB documents and conclude with MSC approval of the feasibility documents. MVR shall provide labor funding by MIPR. The Project Manager will work with the ATRT Leader to ensure that adequate funding is available and is commensurate with the level of review needed. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring. The ATRT leader shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes. Reviewers shall monitor individual labor code balances and alert the ATRT Leader to any possible funding shortages. Each ATR reviewer will have \$1,500 with an additional \$500 for the ATRT lead to set up the review team. Once actual costs are determined, this RP will be revised. Until then, ATR and assistance is estimated at \$16,000 for both the Decision Document review and P&S review. An estimated schedule is presented below:

| Task | Date |
|--|-------------------------------|
| ATR Kick-off (Draft Decision Doc &EA) | October 6, 2014 |
| ATR Review | October 6 – 20, 2014 |
| PDT Evaluation | October 20 – November 3, 2014 |
| ATR Backcheck | November 3 – 7, 2014 |
| ATR Complete (Draft Decision Doc & EA) | November 7, 2014 |
| ATR Kick-off (P&S) | TBD |
| ATR Review (P&S) | TBD |
| PDT Evaluation (P&S) | TBD |
| ATR Backcheck (P&S) | TBD |
| ATR Complete (P&S) | TBD |

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

b. Alternative Formulation Briefing (AFB) – The ATR team will provide an initial review of the AFB documents. Upon completion of the ATR MVR will submit an AFB memo. A conference call between MVD and MVR will be arranged to discuss the project and alternatives in more detail. Following MSC concurrence of the AFB conference call the ATR team will continue to review any changes that occur as feasibility documents are prepared. The ATR team will provide ATR Certification with the projects feasibility submittal.

c. Implementation Documents, P&S - ATR shall be performed on the project plans and specification and any supporting design documentation prior to BCOE sign-off. The review team at a minimum should consist of the members listed in the table below. The total cost of this review should not exceed \$10,000. It is anticipated that this review should not exceed 5 weeks.

Estimated ATR Schedule (Implementation)

| Event | Kick-Off | Reviewers Comments End | PDT Evaluation | Back-Check | Complete |
|-----------------------|----------|------------------------------|-------------------|------------|----------|
| ATR Implementation | TBD | TBD | TBD | TBD | TBD |

Estimated ATR Cost (Implementation)

| Reviewer | Cost |
|-----------------------|-----------------|
| ATR Lead | \$1,000 |
| Environmental | \$1,000 |
| H&H | \$2,000 |
| Geotechnical Engineer | \$2,000 |
| Civil Engineer | \$4,000 |
| Total | \$10,000 |

10. 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. Review of the report will be actively coordinated with State and Federal agencies and will be released to the public for review and comment. Submitted comments will be considered in the final draft of the report.

11. Review Plan Approval And Updates.

The MVD DST Chief is responsible for approving this review plan and ensuring that use of the MVD Model 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 MVD approval are documented in Attachment 2. Significant changes to the review plan (such as changes to the scope and/or level of review) should be reapproved by MVD following the process used for initially approving the plan.

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

Significant changes may result in MVD determining that use of the MVD Model Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-214. The latest version of the review plan, along with the MVD approval memorandum, will be posted on the home district's webpage.

REVIEW PLAN

Freeborn County Section 206 Ecosystem Restoration Project

12. Review Plan Points Of Contact.

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

- [Andrew Leichty, Project Manager, 309-794-5399](#)
- [Sierra Keenan, Plan Formulator, 651-290-5221](#)
- [Gabe Harris, Mississippi Valley Division Point of Contact, 601-634-5926](#)

REVIEW PLAN
Project Name and Location

Attachment 1: Team Rosters

| PDT | | | |
|--|---------------------|--------------|--|
| Discipline | Name | Phone | Email |
| ECO PCX | Jodi Creswell | 309-794-5448 | Jodi.k.creswell@usace.army.mil |
| MVD POC | Gabe Harris | 601-634-5926 | William.g.harris@usace.army.mil |
| CAP Program Manager | Andrew Leichty | 309-794-5399 | Andrew.L.Leichty@usace.army.mil |
| Shell Rock River Watershed, Director of Field Operations | Andy Henschel | 507-379-2964 | Andy.Henschel@co.freeborn.mn.us |
| Plan Formulation | Sierra Schroeder | 651-290-5221 | Sierra.L.Schroeder@usace.army.mil |
| Project Engineer/ Environmental Engineer | Erica Stephens | 309-794-5925 | Erica.L.Stephens@usace.army.mil |
| Hydraulics & Hydrology | Lucie Sawyer | 309-794-5836 | Lucie.m.sawyer@usace.army.mil |
| Geotechnical | Felix Castro | 309-794-5716 | Felix.r.castro@usace.army.mil |
| Structural Engineer | Jeffrey Tripp | 309-794-5419 | Jeffrey.e.tripp@usace.army.mil |
| Environmental | Matthew Afflerbaugh | 309-794-5384 | Matthew.j.afflerbaugh@usace.army.mil |
| Cost Engineer | Benjamin Ferrell | 309-794-5154 | Benjamin.m.ferrell@usace.army.mil |
| Cultural Resources | Brant Vollman | 309-794-5857 | Brant.j.vollman@usace.army.mil |
| Real Estate | Jason Appel | 309-794-5489 | Jason.c.appel@usace.army.mil |

| ATR Team | | | |
|-------------------|-------------|--------------|--------------|
| Discipline | Name | Phone | Email |
| ATR Lead | | | |
| Planner | | | |
| Economics | | | |
| Environmental | | | |
| Hydrology | | | |
| Hydraulics | | | |
| Geotechnical | | | |
| Civil Engineering | | | |
| Real Estate | | | |
| Cost Engineering | | | |

REVIEW PLAN
Project Name and Location

Attachment 2: Review Plan Revisions

| Revision Date | Description of Change | Page/Paragraph Number |
|----------------------|------------------------------|------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |

REVIEW PLAN
Project Name and Location

Attachment 3: Sample Statement of Technical Review for Decision & Implementation Documents

Completion of Agency Technical Review

The Agency Technical Review (ATR) has been completed for the Project Feasibility Report, Environmental Assessment, Preliminary Design Documents, and Cost Estimate for the Freeborn County Section 206 Ecosystem Restoration Project. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. 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 DrCheckssm.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company

Date

SIGNATURE

Name
Project Manager (home district)
Office Symbol

Date

SIGNATURE

Name
Architect Engineer Project Manager¹
Company, location

Date

SIGNATURE

Name
Review Management Office Representative
Office Symbol

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

Name
Chief, Engineering Division (home district)
Office Symbol

Date

SIGNATURE

Name
Chief, Planning Division (home district)
Office Symbol

Date

REVIEW PLAN
Project Name and Location

¹ Only needed if some portion of the ATR was contracted.

26 November 2013

MEMORANDUM FOR CEMVD-PD-SP (Mark Moore)

SUBJECT: MVD Continuing Authorities Program (CAP) Model Review Plan (RP) and MVD CAP Model RP Checklist for the Section 206 Freeborn County Ecosystem Restoration

1. Reference memorandum, CEMVR-PM-M, 15 November 2013, subject as above.
2. This office concurs with subject Review Plan.
3. The RB-T point of contact is Ms. Melissa Mullen, 901-544-0716.



MICHAEL A. TURNER, P.E.
Chief, Business Technical
Division