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

REPLY TO
ATTENTION OF:

CEMVD-PD-SP

31 AUG 2016

MEMORANDUM FOR Commander, St. Paul District

SUBJECT: MVD Continuing Authorities Program (CAP) Section 1135 Model Review Plan and MVD CAP Model Review Plan Checklist, Lower Otter Tail River - Review Plan Approval

1. References:

a. Memorandum, CEMVP-PM-B, 29 July 2016, subject: Projects under the Continuing Authorities Program (CAP) (encl 1).

b. Memorandum, CEMVD-RB-T, 26 August 2016, subject: Continuing Authorities Programs (CAP) Section 1135 Project Modification for the Improvement of the Environment Lower Otter Tail River (CWIS NO. 456750, P2 Number 456750) (encl 2).

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

2. The enclosed Review Plan (RP) (encl 3) 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 Review Plan has been coordinated between the Business Technical Division and the Upper District Support Team.

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. Ben Robinson, CEMVD-PD-SP, (601) 634-5310.

for, DEP CDR

3 Encls

MICHAEL C. WEHR
Major General, USA
Commanding

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

CEMVP-PM-B

29 Jul 16

MEMORANDUM FOR Commander, Mississippi Valley Division (CEMVD-PD-SP/Mr. Ben Robinson), P.O. Box 80, Vicksburg, MS 39181-0080

SUBJECT: Projects under the Continuing Authorities Programs (CAP)

1. The Review Plan checklist and Review Plan for the subject projects are enclosed. I am requesting your approval of the project Review Plans for these projects listed below.

a. CAP Section 14 Emergency Stream Bank Protection, County Highway M, Dunn County, Wisconsin (CWIS No. 456293, P2 Number 456293)

b. CAP Section 204 Beneficial Use of Dredged Material, Upper Pool 4, Pierce County, Wisconsin (CWIS No. 456995, P2 Number 456995)

c. CAP Section 1135 Project Modification for the Improvement of the Environment Lower Otter Tail River (CWIS No. 456750, P2 Number 456750)

2. These Review Plans were drafted using the MVD Model Review Plan for Continuing Authorities Program Section 14, 107, 111, 204, 206, 208 or 1135 Projects.

3. In addition to the Review Plan and Review Plan Checklists, enclosed with this memorandum is the most current Fact Sheet, which was used to determine Federal interests for the subject projects.

4. If you have any questions regarding this transmittal package, please contact Mr. Nate Campbell, project manager, at 651-290-5544 or by email at nathan.j.campbell@usace.army.mil

Encls

SAMUEL L. CALKINS
COL. EN
Commanding

ENCL 1

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

REPLY TO
ATTENTION OF:

CEMVD-RB-T 26 AUG 2016

MEMORANDUM FOR CEMVD-PD-SP (Don Balch)

SUBJECT: Continuing Authorities Programs (CAP) Section 1135 Project Modification for the Improvement of the Environment Lower Otter Tail River (CWIS NO. 456750, P2 Number 456750)

1. Reference memorandum, CEMVP—PM-B, 29 Jul 2016, subject as above.

2. RB-T has reviewed the subject Project under the CAP request and all of our comments have been satisfactorily addressed by the St. Paul District. This office concurs with the recommendation for approval.

3. RB-T POC is Scott Stewart, 601-634-5883.

for MICHAEL A.TURNER
Chief, Business Technical
Division

ENCL 2

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

Lower Ottertail River, Wilkin County Minnesota
Section *1135* Project

St. Paul District

MSC Approval Date: *Pending*
Last Revision Date: *26 August, 2016*

US Army Corps
of Engineers ®

ENCL 3

Review Plan
Using the MVD Model Review Plan

Lower Otter Tail River, Wilkin County, Minnesota
Section *1135* Project

TABLE OF CONTENTS

REVIEW PLAN

Lower Otter Tail River, Wilkin County, Minnesota

1. Purpose and Requirements.

a. Purpose. This Review Plan defines the scope and level of peer review for the *Lower Otter Tail River, Wilkin County, Minnesota*, Section *1135 Project* products. *Project study and implementation products requiring review include the following: Project Factsheet; Feasibility Report with Integrated Environmental Assessment; an environmental and cultural assessment; cost estimate; economic analysis; hydraulic and hydrologic analysis; geotechnical analysis; real estate plan; and drawings and specifications.*

Section 1135 of the Water Resources Development Act of 1986, Public Law 99-662, provides the authority to modify existing Corps projects to restore the environment and construct new projects to restore areas degraded by Corps projects 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 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, 15 December 2012.

(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) ER 1110-1-8159, Engineering and Design – DrChecks, 10 May 2001.

(8) ER 415-1-11 Engineering and Construction – Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Reviews, 1 January 2013.

(9) MVD Program Mgmt Plan (PgMP) for the Continuing Authorities Program (CAP), June 2012.

(10) Section 1135, Lower Otter Tail River, Project Management Plan (PMP), P2 #456750.

2. Review Management Organization (RMO) Coordination.

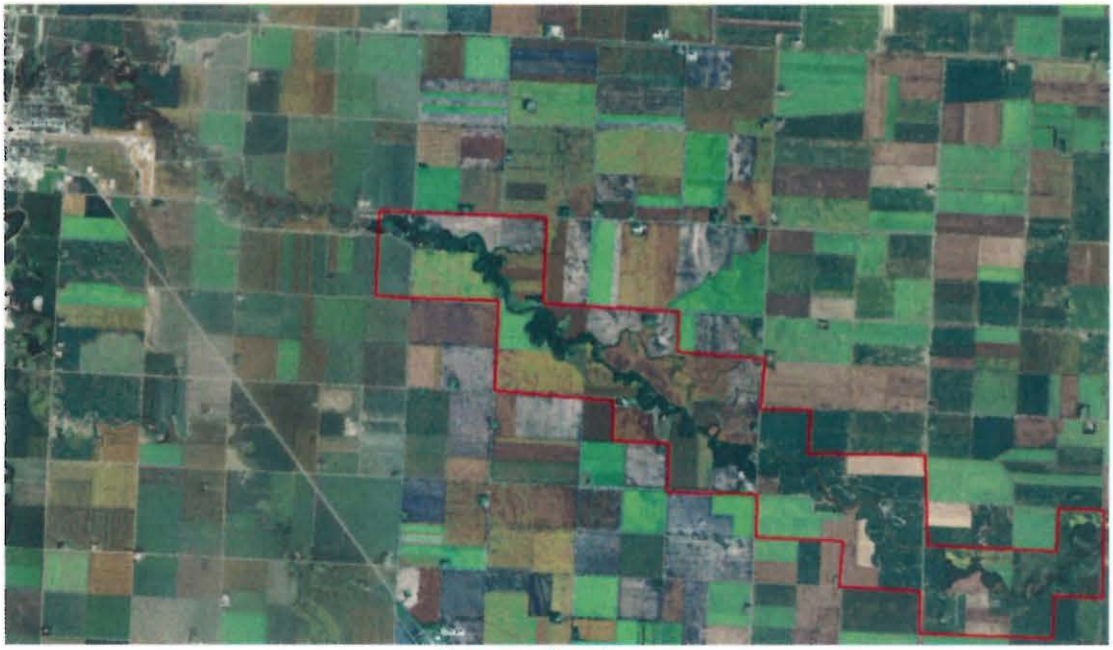
The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for Section *1135 Projects* is MVD. MVD will coordinate and approve the review plan and manage the Agency Technical Review (ATR). The home District will post the approved review plan on its public website.

3. Project Information.

a. Decision *and Implementation* Documents. The *Lower Otter Tail River, Wilkin County, Minnesota* 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. *Plans and Specifications (P&S) and the Design Documentation Report (DDR) will also be prepared for implementation of the project and will undergo ATR review.*

b. Study/Project Description. *The project area is located east of the city of Breckenridge, MN on a reach of the Lower Otter Tail River (LOTR). The boundaries of the LOTR are Orwell Dam at the upstream extent and the confluence of the Otter Tail River with the Bois de Sioux River at Breckenridge, Minnesota. Breckenridge is approximately 45 miles south of Fargo, ND and 180 miles northwest of Minneapolis, MN. The proposed project area starts approximately 8.5 river miles upstream of the confluence with the Bois de Sioux River and continues upstream for approximately 11.5 river miles towards Orwell Dam.*

In 1954, the Corps of Engineers completed construction of a flood control project on the Lower Otter Tail River. The project provided protection against a 10-year flood by cleaning, enlarging, and straightening the existing river channel. The channel was excavated and widened to a bottom width of 50-feet between river miles 9.7 and 16.0 and 30-feet between river miles 16.0 and 21.1. The overall length of the river in this reach was reduced from 18 miles to 11 miles as a result of the project.



Extents of study area

Approximately 60 years after construction, the LOTR is characterized by unstable banks, headcutting, excessive sediment loading, and degraded in-stream and riparian habitats. The current instability and bank erosion is largely a result of channel straightening associated with the Corps' flood control project. In 2004, the Minnesota Pollution Control Agency (MPCA) listed the LOTR reach as impaired for exceeding the turbidity standard for aquatic life (the only reach of the river listed as impaired for turbidity). Upstream of Orwell Dam the Otter Tail River is recognized as having the most diverse fish species population (75 species) in the Red River Basin, but habitat quality in the lower reaches of the river is considered poor and cannot provide a diverse array of quality aquatic habitat to allow different species to thrive. Restoration of the LOTR by stabilizing banks, reconnecting meanders, and restoring other stream functions was identified as part of a comprehensive management solution for the river by the Buffalo-Red River Watershed District (BRRWD). Restoration/enhancement of aquatic habitat in the LOTR would also support efforts to restore Lake Sturgeon to this portion of the Red River basin.

Potential measures to be taken along the LOTR include;

1) *Reconnect Cutoff Meander Bends by diverting the straightened river channel back into previously cutoff meander bends will increase channel length and decrease stream gradient, thus lowering flow velocity and bed shear stress.*

2) *Stabilize channel bed and banks using grade control. The grade control would likely consist of rock riffles consisting of boulders placed across the existing channel in an arc shape. These structures to raise ground and surface water elevations, reduce erosional forces, provide soil moisture conditions suitable for native riparian vegetation capable of stabilizing compromised streambanks*

3) *It is possible a combination of both measure could be used. In this case habitat benefits would be expected to result from the proposed alternative would be derived from an increase in habitat diversity and the restoration of river channel length. The diversity would result from the reestablishment of riffles and pools within the existing channel that under current conditions is likely 100% shallow run habitat. Channel length would be regained by reconnecting historic oxbows.*

It is anticipated a wide range of species would benefit from such an increase in channel length and habitat diversity.

c. Factors Affecting the Scope and level of Review. *The project does not involve imminent life or safety issues requiring extensive or independent review. Risk and uncertainty with an aquatic ecosystem restoration project are minimal and will not warrant extensive review. The ATR team should focus on the technical analysis, hydrology/hydraulic analysis and development of alternatives to assure quality control in the projects forwarded for MSC consideration*

Project risks/uncertainties include high water and construction funding availability. High water events are typically overcome with schedule extensions for construction contracts and are typically less than 6-month delays depending on the weather and season. Construction funding could delay the project for 1 year or more. The impact will continue if construction funding is delayed for 2 or more years, allowing for the continuation of a degraded habitat along the Otter Tail River. Although these two risks are possible even if they do occur ultimately they would have a low impact on the projects overall success.

No technical or institutional challenges are expected. Planning, constructing and operating River restoration projects have been completed on similar rivers by the district and the Minnesota Department

of Natural Resources. Social issues should not be a challenge as the local watershed district is supportive of the project.

This habitat improvement project is not likely to have significant economic, environmental or social impacts to the Nation. The Sponsor and applicable federal, state and local agencies are in support of the project.

The Governor has not requested peer review by independent experts.

Agencies involved in coordinating this project are the Wildlife Service (FWS), Minnesota Department of Natural Resources, and the Buffalo Red River Watershed District. There will be no significant interest by other agencies on this project because the first response to any environmental issues will be to avoid them.

This aquatic ecosystem restoration project is not likely to be controversial nor involve 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.

This project report will not contain influential scientific information or be a highly influential scientific assessment.

The anticipated project design will not 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 anticipated project design does not require redundancy, resiliency, and/or robustness. No unique construction sequencing or a reduced or overlapping design construction schedule is anticipated.

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 is the Buffalo Red River Watershed District. Based on initial discussions with the Sponsor, no work in-kind is expected. The Sponsor is expected to provide funding for their portion of the cost share through cash contributions. However if products are provided as in-kind work they will undergo DQC and ATR reviews similar to USACE produced deliverables.*

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.

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 by a completed (signed)

memorandum for record of technical review. 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.

b. Plans and Specifications 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 consists of at least one technical check; a DQCR; and a Biddability, Constructability, Operability, Environmental, Sustainability (BCOES) Review. DQC at a minimum 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.

BCOES occurs in the plans and specifications phase of the project. In accordance with ER 415-1-11, the Project Engineer will conduct a BCOES 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), the DDR and Engineering Considerations. The review will commence at least 30 days prior to advertisement. Review comments and resolutions will be entered into DrChecks. The BCOES review will be documented by a completed (signed) BCOES 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 MSC Decision Milestone (MDM) 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 outside 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: *Feasibility study, plans and specifications, design documentation report.*

b. Required ATR Team Expertise. *Expertise in Plan Formulation, Environmental compliance, Hydraulics and Hydrology, Cost Estimating, Civil Engineering will be represented on the ATR Team. The ATR Team Leader role can be assigned to any of the ATR team members. An ATR Team member may serve more than one role if the scope of the study and the level of effort warrant. The ATR Team Leader will follow the requirements as outlined in the "ATR Lead Checklist" developed by the National Planning Centers of Expertise.*

ATR Team Members/Disciplines	***Expertise Required***
ATR Lead	*The ATR lead should be a senior professional preferably with experience in preparing Section 1135, 204, or 206 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 MVD.
Planning	*The Planning reviewer should be a senior water resources planner with experience in Section 1135, 204 or 206 project development and review. The Planning reviewer will participate in the feasibility ATR.*
Environmental/Cultural Resources	*The Environmental reviewer should be a senior level biologist with experience in cultural resources and Section 1135, 204 or 206 project development and review. The Environmental reviewer will participate in the feasibility and the Implementation ATR.*
Hydrology/Hydraulic Engineering	*The Hydrology/Hydraulics reviewer should be a senior engineer with experience in Section 1135, 204 or 206 project development, review, and familiar with HEC-RAS modeling. The Hydrology/Hydraulics reviewer will participate in the feasibility ATR and the Implementation ATR.*
Geotechnical Engineering	*The Geotechnical Engineering reviewer should be a senior engineer with experience in Section 1135, 204, or 206 Project development and review. The Geotechnical Engineering reviewer will participate in the Implementation ATR.*
Civil Engineering	*The Civil Engineering reviewer should be a senior engineer with experience in Section 1135, 204, or 206 Project development and review. The Civil Engineering reviewer will participate in the Implementation ATR.*
Cost Engineering	*Cost DX Staff or Cost DX Pre-Certified Professional with experience preparing cost estimates for Section 1135, 204, or 206 projects. The Cost DX Staff or Cost DX Pre-Certified Professional will participate in the feasibility ATR.*
Real Estate	*The Real Estate reviewer should be a senior level real estate professional with experience in real estate and Section 1135, 204 or 206 project development and review. The Real Estate reviewer will participate in the feasibility and the Implementation ATR.*

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 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	Certification / Approval Status
IWR-Plan	*The IWR-Plan was developed by the Institute of Water Resources as accounting software to compare habitat benefits among alternatives.*	*Certified*
USFWS Habitat Suitability Index Models (HEP or Bluebooks)	*The Habitat Evaluation Procedure (HEP) is a species-habitat approach to impact assessment using selected evaluation species documented with an index, the Habitat Suitability Index (HSI). This value is derived from an evaluation of the ability of key habitat components to compare existing habitat conditions and optimum habitat conditions for the species of interest. There are over 150 models for invertebrates, fish, amphibians, reptiles, birds, mammals, and communities.* *As the project progresses, a determination will be made as to which HEP models are most appropriate for use.*	*Approved for use, pending review of spreadsheets or other accounting software*
Micro-Computer Aided Cost Engineering System (MCACES) MII Version 3.0	*MCACES is a cost estimation model.* *This model will be used to estimate costs for the Lower Otter Tail River project.*	*Certified*

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*	*Certified*

9. Review Schedules And Costs.

a. **ATR Schedule and Cost.** ***Feasibility*** *- ATR review should consist of team lead (4 hours), planning review (8 hours), environmental/cultural resources review (8 hours), hydraulics and hydrology review (8 hours), cost engineering review (8 hours). The total cost of this review should not exceed $10,000. It is anticipated that this review should not exceed 4 weeks. Following technical review, the project documents will be submitted to Mississippi Valley Division (MVD) for policy review and approval.*

ATR Estimated Schedule (Decision Documents)
TBD - Submit review material to ATR team for review, ATR team submits comments
TBD - PDT begins evaluation of comments
TBD - ATR team begins backcheck and comment close out
TBD – ATR sign-off complete

b. ***MSC Decision Milestone (MDM)*** *- MVP will submit a MDM memo in November, 2017. If needed a conference call between MVD and MVP will be arranged to discuss the project and alternatives in more detail.*

c. ***Implementation Documents, P&S and DDR*** *- ATR review should consist of geotechnical review (4 hours), hydraulics and hydrology review (20 hours), civil engineering review (20 hours), Environmental Review, (20 Hours), ATR team lead (20 hours). The total cost of this review should not exceed $22,000. It is anticipated that this review should not exceed 4 weeks.*

ATR Estimated Schedule (Implementation Documents, P&S)
TBD - Submit review material to ATR team for review, ATR Team submits comments
TBD - PDT begins evaluation of comments
TBD - ATR team begins back check and comment close out
TBD – ATR sign-off complete

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. *Coordination with State and local agencies has been ongoing throughout the project development. Agencies with regulatory review responsibilities will be contacted for additional coordination as required by applicable laws and procedures.*

Upon completion of the ATR and MDM, there will be a public review of the EA document for this project in February 2018. The EA will describe the alternatives considered and why the recommended plan was chosen, as well as any environmental impacts the recommended plan will have.

11. Review Plan Approval And Updates.

The *MVD Commander* 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. 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.

12. Review Plan Points Of Contact.

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

- *Angela Deen, St. Paul District (MVP), Plan Formulation; (651) 290-5293*
- *Nathan Campbell, St. Paul District (MVP), Project Management; (651) 290-5544*
- *Nathan Wallerstedt, St. Paul District (MVP), CAP Program Manager; (651) 290-5477*
- *Ben Robinson, Mississippi Valley Division (MVD), District Support Team; (601) 634-5310*
- *Sarah Palmer, Mississippi Valley Division (MVD), CAP Program Manager; (601) 634-5910*

Attachment 1: Team Rosters

Discipline/Title	Name	Phone	Email
Project Development Team			
Project Manager	Nathan Campbell	651-290-5544	Nathan.j.campbell@usace.army.mil
CAP Manager	Nathan Wallerstedt	651-290-5477	Nathan.h.wallerstedt@usace.army.mil
Plan Formulation	Angela Deen	651-290-5293	Angela.m.deen@usace.army.mil
Hydraulics & Hydrology	Lisa Buchli	651-290-5613	Lisa.a.buchli@usace.army.mil
Geotechnical	Jason Foss	651-290-5583	Jason.foss@usace.army.mil
Cost/Spec/EC-D Lead	Susan Taylor	651-290-5974	Susan.a.taylor@usace.army.mil
Civil/Layout/Specs	Greg Fischer	651-290-5464	Russell.g.fischer@usace.army.mil
Environmental	Eric Hanson	651-290-5386	Eric.r.hanson@usace.army.mil
Economics	Kevin Bluhm	651-290-5247	Kevin.w.bluhm@usace.army.mil
Cultural Resources	Brad Perkl	651-290-5370	Bradley.e.perkl@usace.army.mil
Construction	Tom Johnson	651-290-5862	Thomas.r.johnson@usace.army.mil
Real Estate	Steph Dupey	651-290-5396	Stephanie.t.dupey@usace.army.mil
GIS	Keith LeClaire	561-290-5491	Keith.r.leclaire@usace.army.mil
Contracting	Kevin Henricks	651-290-5414	Kevin.p.henricks@usace.army.mil
Small Business	Gwendolyn Davis	651-290-5723	Gwendolyn.k.davis@usace.army.mil
Public Affairs	Shannon Bauer	651-290-5108	Shannon.l.bauer@usace.army.mil
Local Sponsor Contacts			
Buffalo Red River Watershed District	Bruce Albright	218-354-7710	BAlbright@brrwd.org
District Quality Control Review Team			
Plan Formulation			
Hydraulics & Hydrology			
Geotechnical			
Cost/Spec/EC-D Lead			
Civil/Layout/Specs			
Environmental			
Economics			
Cultural Resources			
Construction			
Real Estate			
Agency Technical Review			
Lead			
Plan Formulation			
Environmental			
Hydrology/Hydraulics			
Cost			
Geotechnical			
Civil Engineering			
Real Estate			

ATTACHMENT 2: STATEMENT OF TECHNICAL REVIEW FOR DECISION *& IMPLEMENTATION* DOCUMENTS

Completion of Agency Technical Review

The Agency Technical Review (ATR) has been completed for the *Project Fact-Sheet, Environmental Assessment, Preliminary Design Drawings, and Cost Estimate* for *Lower Otter Tail River, Wilkin County, Minnesota.* 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 DrChecks[sm].

_____ _____

ATR Team Leader (TBD) Date
ATR Team Leader
CEXXX

_____ _____

Nathan Campbell Date
Project Manager
CEMVP

_____ _____

Fay Lachney Date
Review Management Office Representative
CEMVD

Certification of Agency Technical Review

Significant concerns and the explanation of the resolution are as follows: *TBD*

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

_____ _____

Michael J. Bart P.E. Date
Chief, Engineering & Construction Division
CEMVP

_____ _____

Thomas L. Crump P.E. Date
Chief, RPED
CEMVP

Attachment 2: Review Plan Revisions

Revision Date	Description of Change	Page/Paragraph Number

MVD CAP Review Plan Checklist

Date: 7/29/2016
Originating District: MVP - St. Paul District
Project/Study Title: Lower Otter Tail River
P2# and AMSCO#: 456750
District POC: Nathan Campbell
MSC Reviewer: Sarah Palmer
CAP Authority: 1135
Other Program Directed to follow CAP Processes: n/a

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?	Yes ☒ No ☐
Or Other Program Directed to follow CAP Processes?	Yes ☐ No ☒
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 ☒ No ☐
b. Does it include a table of contents?	b. Yes ☒ No ☐
c. Is the purpose of the RP clearly stated?	c. Yes ☒ No ☐
d. Does it reference the Project Management Plan (PMP) of which the RP is a component?	d. Yes ☒ No ☐
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 ☒ No ☐
f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed?	f. Yes ☒ No ☐
g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	g. Yes ☒ No ☐
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.* **Comments:	

2. Is the RP detailed enough to assess the necessary level and focus of the reviews?	Yes ☒ No ☐
3. Does the RP define the appropriate level of review for the project/study?	Yes ☒ No ☐
a. Does it state that DQC will be managed by the home district in accordance with the MVD and district Quality Management Plans? b. Does it state that ATR will be managed by MVD? c. Does it state whether IEPR will be performed? For Sec 103 and Sec 205, see additional questions in 5. below. **Comments:** *The RP does not specifically address IEPR, however IEPR is not required for a Section 1135 project, nor is a SAR required due to no threat to human life and safety.*	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐
4. Does the RP explain how ATR will be accomplished?	Yes ☒ No ☐
a. Does it identify the anticipated number of reviewers? b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)? c. Does it indicate that ATR team members will be from outside the home district? d. Does it indicate where the ATR team leader will be from? e. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?* **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.* **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 MVP will update the RP to include ATR names.*	a. Yes ☒ No ☐ b. Yes ☒ No ☐ c. Yes ☒ No ☐ d. Yes ☐ No ☒ e. Yes ☐ No ☒
5. For Sec 103 and Sec 205 projects, does the RP explain how IEPR will be accomplished?	Yes ☐ No ☐ n/a ☒
a. Is an exclusion being requested, requiring CG approval? b. Does it provide a defensible rationale for the decision on IEPR? c. If IEPR is required, does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers? d. If IEPR is required, does the RP indicate which PCX will manage the IEPR and whether any coordination with the PCX has occurred? **Comments:**	a. Yes ☐ No ☐ b. Yes ☐ No ☐ c. Yes ☐ No ☐ d. Yes ☐ No ☐

6. Does the RP address review of sponsor in-kind contributions?	Yes ☒ No ☐
7. Does the RP address how the review will be documented?	Yes ☒ No ☐
a. Does the RP address the requirement to document ATR and IEPR comments using Dr Checks? b. Does the RP explain how the IEPR will be documented in a Review Report? c. Does the RP document how written responses to the IEPR Review Report will be prepared? 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? **Comments:** *IEPR is not required for a Section 1135 project.*	a. Yes ☒ No ☐ b. Yes ☐ No ☐ n/a ☒ c. Yes ☐ No ☐ n/a ☒ d. Yes ☐ No ☐ n/a ☒
8. Does the RP address Policy Compliance and Legal Review?	Yes ☒ No ☐
9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	Yes ☒ No ☐
a. Does it provide a schedule for ATR including review of the MSC Decision Milestone (MDM) materials and final report? b. Does it present the timing and sequencing for IEPR? c. Does it include cost estimates for the reviews?	a. Yes ☒ No ☐ b. Yes ☐ No ☐ n/a ☒ c. Yes ☒ No ☐
10. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include: • 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	Yes ☐ No ☐ n/a ☒ **Comments:**
11. Does the RP address opportunities for public participation?	Yes ☒ No ☐
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?	Yes ☒ No ☐
13. Has the approval memorandum been prepared and does it accompany the RP?	Yes ☒ No ☐

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 ☒ No ☐
2. Does the RP contain documentation of risk-informed decisions on which levels of review are appropriate?	Yes ☒ No ☐
3. Does the RP present the tasks, timing, and sequence of the reviews (including deferrals)?	Yes ☐ No ☒
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? **Comments:** *Details for the reviews during the Implementation phase of the project will be developed and incorporated into a revised Review Plan at a later date.*	a. Yes ☐ No ☒ b. Yes ☐ No ☒
4. Does the RP address engineering model review requirements?	Yes ☒ No ☐
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? 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? **Comments:** *It is anticipated only certified engineering models will be used for this project. The models themselves should not need reviews.*	a. Yes ☒ No ☐ b. Yes ☐ No ☒ c. Yes ☒ No ☐ d. Yes ☐ No ☒
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 ☒ No ☐
6. Does the RP address expected in-kind contributions to be provided by the sponsor?	Yes ☒ No ☐ Yes ☐ No ☐

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? **Comments:** *No in-kind contributions are expected from the sponsor at this time.*	
7. Does the RP explain how the reviews will be documented?	Yes ☒ No ☐
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?	a. Yes ☒ No ☐
b. Does the RP explain how the Type II IEPR will be documented in a Review Report?	b. Yes ☐ No ☒
c. Does the RP document how written responses to the Type II IEPR Review Report will be prepared?	c. Yes ☐ No ☒
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? **Comments:** *The RP does not specifically address IEPR, however IEPR is not required for a section 1135 project, nor is a SAR required due to no threat to human life and safety.*	d. Yes ☐ No ☒

8. Has the approval memorandum been prepared and does it accompany the RP? Yes ☒ No ☐