



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

REPLY TO
ATTENTION OF:

CEMVD-DE

15 AUG 17

MEMORANDUM FOR Commander, Rock Island District

SUBJECT: Review Plan Approval for the Upper Mississippi River Restoration (UMRR) Habitat Rehabilitation Enhancement Project, Delair Division

1. References:

a. Memorandum, CEMVR-PD-F, 30 May 2017, subject: Upper Mississippi River Restoration (UMRR) Habitat Rehabilitation Enhancement Project, Delair Division Review Plan (RP) (encl 1).

b. Memorandum, CEMVD-RB-T, 19 July 2017, subject as above (encl 2).

c. Memorandum, CECW-MVD, 16 May 2012, subject: Request for Approval of a Model Peer Review Plan for the Upper Mississippi River System Environmental Management Program (encl 3).

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

2. The enclosed RP (encl 4) is a combined decision document and implementation document review plan. It includes the MVD EMP checklist and has been prepared in accordance with EC 1165-2-214. The RP 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 website.

CEMVD-DE

SUBJECT: Review Plan Approval for the Upper Mississippi River
Restoration (UMRR) Habitat Rehabilitation Enhancement Project,
Delair Division

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

4 Encls


MICHAEL C. WEHR
Major General, USA
Commanding



REPLY TO
ATTENTION OF

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

MAY 30 2017

CEMVR-PD-F

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

SUBJECT: Upper Mississippi River Restoration (UMRR) Habitat Rehabilitation Enhancement Project, Delair Division Review Plan (RP)

1. The subject RP is submitted for your review and approval. The RP is a combined plan for the decision and implementation documents. It includes the UMRR checklist and is prepared in accordance with EC 1105-2-214. An electronic copy of the RP has been sent to Mr. Gabe Harris, CEMVD-PD-SP.
2. The Rock Island District points of contact are Mr. Nathan Richards, Study Manager, (309) 794-5286, or email: nathan.s.richards@usace.army.mil, or Ms. Julie Millhollin, Project Manager, (309) 794-5214, or email: julie.l.milhollin@usace.army.mil.

Encl

A handwritten signature in black ink, appearing to read "C.S. Baumgartner", with a long horizontal stroke extending to the left.

CRAIG S. BAUMGARTNER
COL, EN
Commanding

REVIEW PLAN
Using the MVD Model Review Plan
for the
Upper Mississippi River Restoration (UMRR)
and
Referencing the UMRR Programmatic Review Plan (PRP)

Delair Division
Pike County, IL – Mississippi River Pool 24
River Mile 278.0 – 281.0

Rock Island District

MSC Approval Date: *None*
Last Revision Date: *None*



**US Army Corps
of Engineers®**
Rock Island District

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

*Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0*

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REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0

1. Purpose and Requirements

a. Purpose

This Review Plan defines the scope and level of peer review for the Upper Mississippi River Restoration (UMRR) Habitat Rehabilitation Enhancement Project (HREP) Delair Division, Pike County, Illinois – Mississippi River Pool 24, River Mile 278.0 – 281.0. Public Law 99-662 of the 1986 WRDA, as amended, authorizes the U.S. Army Corps of Engineers (USACE) to study, design, and construct HREPs on the Upper Mississippi River System without specific Congressional authorization. This Review Plan is for the Delair Division Feasibility Report with Integrated Environmental Assessment as well as the Plans and Specifications (P&S) and Design Documentation Report implementation documents. Products included for review during feasibility include an environmental and cultural assessment; plan formulation; cost estimate; incremental cost analysis; hydraulic and hydrologic analysis; geotechnical analysis; real estate plan; and drawings and specifications. Products included for review during the implementation phase include the P&S document and Design Documentation Report.

The UMRR study and construction authority is contained in the UMRR Programmatic Review Plan (UMRR PRP), Section IV.

b. Applicability

This Review Plan is based on the MVD Model Review Plan, 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.

The applicability regarding the UMRR is contained in the UMRR PRP, Section II.

c. References

- Reference materials shown in the UMRR PRP.
- Delair Division Project Management Plan, approved 17 August 2015.
- Interim Guidance for District Quality Control of Planning Products, approved 25 January 2017.

2. Review Management Organization (RMO) Coordination

RMO coordination will be in accordance with the UMRR PRP, Sections I, III, VI, and VIII. The RMO for the Agency Technical Review (ATR) will be MVD in lieu of Ecosystem Restoration Planning Center of Expertise (ECO-PCX). The ECO-PCX will continue to serve in its advisory role.

3. Project Information

a. Decision and/or Implementation Document

The Delair Division 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. The prepared Environmental Assessment (EA) and decision document will undergo DQCR and ATR review. An implementation document (P&S) and Design Documentation Report (DDR) will

REVIEW PLAN
*Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0*

also be prepared for implementation of the project and will undergo District Quality Control Review (DQCR) and ATR.

b. Study/Project Description

The Delair Division (Division) of the Great River National Wildlife Refuge (NWR) is a 1,730-acre complex of wetland, bottomland forest, and wet meadows located along the left descending bank of the Mississippi River between river miles 278 and 281. The entire Division lies within Pool 24, 5 miles west of Pleasant Hill, Illinois, in Pike County and is managed by the U.S. Fish & Wildlife Service (USFWS) (Figure 1).

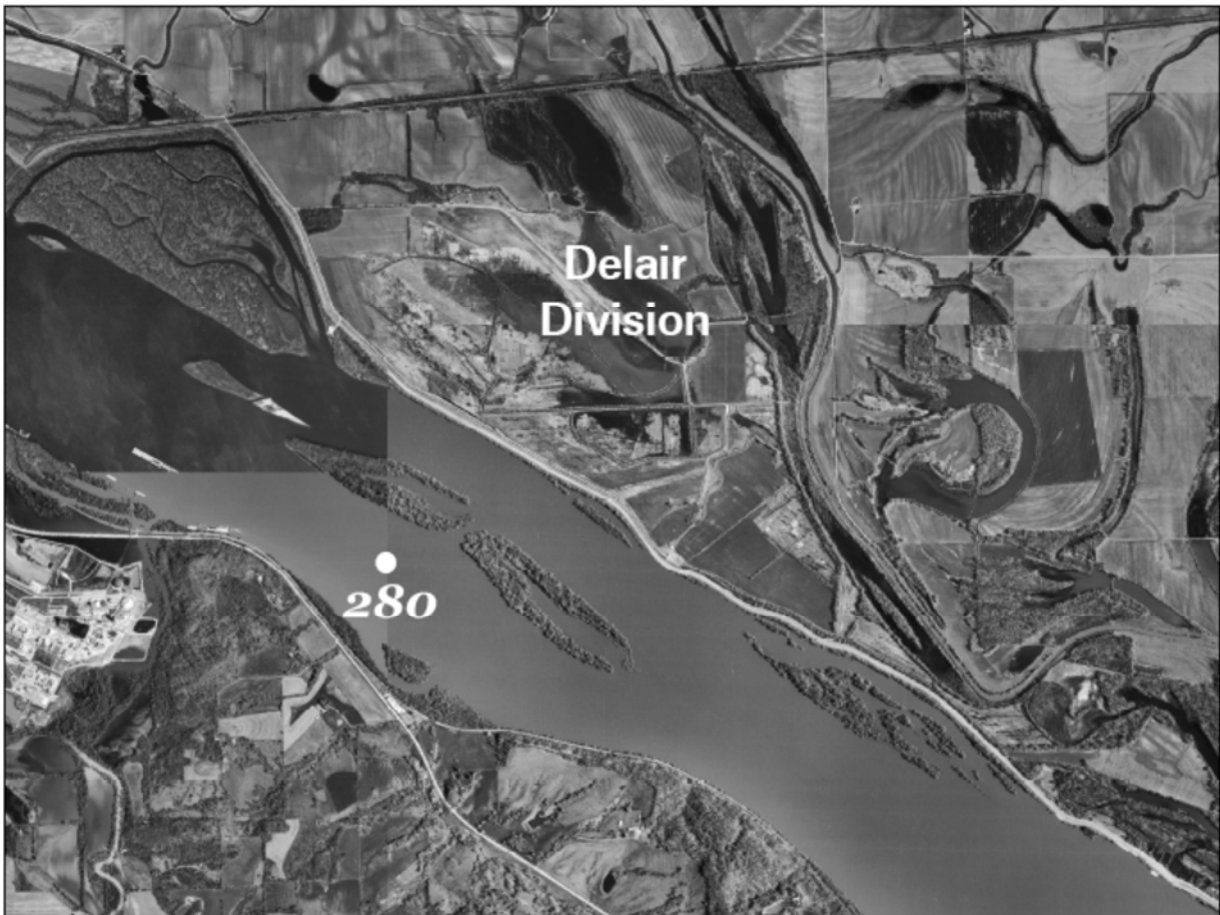


Figure 1. Delair Division HREP Project Area

When originally acquired, the area was almost entirely cropland. Much of the Division has been restored to native habitat types. Ten wetland units (about 450 acres total) are managed to re-create the historic water regime of the Upper Mississippi River (UMR) and to promote growth of native wetland vegetation and invertebrates. These units receive heavy use by migrating waterfowl, shorebirds, marsh and wading birds, and other wetland-dependent wildlife.

Approximately 500 acres of the Division are floodplain forest. The forest includes stands of silver maple, cottonwood, and ash as well as stands of diverse and high quality hard mast species. However,

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0

the forest is heavily fragmented by small crop fields. Thirty-five acres of warm season grasses were planted in the 1980s to protect identified archeological sites.

The Division is located within the Sny Levee and Drainage District and is protected from flooding by the mainstem levee, which would allow effective restoration of historic floodplain habitat types to occur. Due to the low elevation and proximity to the river, portions of the Division receive year-round seep water. Due to historical land use modifications implemented within the project area for the purposes of agricultural and the extensive leveed agricultural area which presently surrounds the project site, ecological processes and functions are decreasing over time. In particular, current forest acreage on the Division is interspersed with small crop fields and is heavily fragmented, which severely limits the sustainability, recruitment, and structure of the forest. This in turn reduces habitat value for many species of nesting neotropical migrant songbirds and other forest dependent species. In addition, significant unnecessary infrastructure, which inadequately handles the volume of groundwater entering the site, limits the structural and habitat value of the wetland areas.

Potential project features to address these problems include:

- optimizing topographic and bathymetric diversity of the site to more naturally displace water throughout the site,
- maximizing wetland habitat quality by improving water control and delivery system,
- installing of groundwater wells to provide a reliable water source for wetland tracts, and
- restoring wetland habitat through optimum elevations, water inundation duration, and species diversity plantings.

The UMRR study and construction authority is contained in the UMRR PRP, Section IV.

c. Factors Affecting the Scope and Level of Review

The factors affecting the scope and level of review are discussed in the UMRR PRP, Section V.

d. In-Kind Contributions

Products and analyses provided by the non-Federal sponsor, USFWS, as in-kind services are subject to District Quality Control (DQC) and ATR, similar to any products developed by USACE. No in-kind products are anticipated.

4. District Quality Control Review (DCQR)

The DCQR will be conducted in accordance with the UMRR PRP, Section III.A, [and in accordance with Interim Guidance for District Quality Control of Planning Products approved by MVD 24 January 2017.](#)

5. Agency Technical Review (ATR)

The ATR will be conducted in accordance with the UMRR PRP, Section III.B and VI. To assure independence, the leader of the ATR team shall be from outside the home MSC.

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*Delair Division, Pike County, IL – Mississippi River Pool 24,
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6. Independent External Peer Review (IEPR)

A programmatic exclusion for the UMRR Program was approved 22 February 2012.

7. Policy and Legal Compliance Review

The Policy and Legal Compliance Reviews will be conducted in accordance with the UMRR PRP, Section III.D.

8. Cost Engineering Directory of Expertise (DX) Review and Certification

Cost Engineering DX Review and Certification will be conducted in accordance with the UMRR PRP, Section VIII.D.

9. Model Certification and Approval

Approval of planning and engineering models used in UMRR projects will be in accordance with the UMRR PRP, Section III.E, and Section VII. *See Table 1.*

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*Delair Division, Pike County, IL – Mississippi River Pool 24,
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Table 1. Planning and Engineering Models That May Be Used
in the Development of the Delair Division Decision Document

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification/Approval Status
IWR Planning Suite II	<p>Institute of Water Resources (IWR) Planning Suite II is an upgraded version of IWR-Plan developed by the IWR and continues to serve as software to aid in the comparison of habitat benefits and costs for various alternatives.</p> <p>This model will be used to conduct cost effectiveness and incremental cost analysis for the final array of alternatives</p>	Certified for National Use
Habitat Evaluation Procedures (HEP) – Habitat Suitability Index (HSI) Models	<p>HEP is a species-habitat approach to assessing the quality of habitat for selected evaluation species serving as proxies for the considered habitat type. The habitat quality is documented with a HSI score on a scale of 0–1. This value is derived from an evaluation of key habitat components necessary for the reproduction, growth, and survival of the species supported by the habitat.</p> <p>HSI models being considered include:</p> <ul style="list-style-type: none"> • Fox Squirrel • Gray Squirrel • Black Capped Chickadee • Bullfrog • Red Eared Slider • Wood Duck 	All listed HSI models are Approved for Regional Use within their described geographic regions.
Micro-Computer Aided Cost Engineering System (MCACES) MII Version 3.0	<p>MCACES is a cost estimation model.</p> <p>This model will be used to estimate costs for the HREP.</p>	Certified
ADH 2DModel	<p>The 2D shallow water equations in ADH are used to model open channel flow environments such as rivers, estuaries, reservoirs, and coastal regions. ADH in 2D calculates variables such as velocity, depth, and concentrations that describe their distribution in the horizontal plane.</p>	Certified

10. Review Schedules and Costs

Review schedules and costs are included for decision documents during the feasibility phase. Prior to the implementation phase this review plan will be modified to include a detailed account of schedule and costs for review of implementation phase documentation.

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Delair Division, Pike County, IL – Mississippi River Pool 24,
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A. DQC Estimated Schedule and Cost

1) DQC Estimated Schedule

Event	Kick-off	Reviewer Comments End	PDT Evaluation	Back Check	Complete
Feasibility	01 Aug 2018	01 Sept 2018	15 Sept 2018	1 Oct 2018	18 Oct 2018
P&S	01 Oct 2019	31 Oct 2019	15 Nov 2019	31 Nov 2019	15 Dec 2019

2) DQC Estimated Cost

Reviewer	Feasibility	P&S	Total Cost
Real Estate	\$2,000	\$1,000	\$3,000
Geotechnical Engineer	\$1,000	\$3,000	\$4,000
Structural/Mechanical Engineer	\$1,000	\$3,000	\$4,000
Regulatory	\$0	\$0	\$0
Environmental	\$3,000	\$1,000	\$4,000
Plan Formulation	\$3,000	\$1,000	\$4,000
Civil Engineer	\$3,000	\$2,000	\$5,000
H&H Engineer	\$3,000	\$2,000	\$5,000
Cultural Resources	\$1,000		\$1,000
TOTAL	\$17,000	\$13,000	\$30,000

B. ATR Estimated Schedule and Cost

1) ATR Estimated Schedule

Event	Kick-off	Reviewer Comments End	PDT Evaluation	Back Check	Complete
Pre-MDM ATR	21 Oct 2018	21 Nov 2018	01 Dec 2018	02 Dec 2018	19 Dec 2018
Pre-MDM Cost ATR	21 Oct 2018	21 Nov 2018	01 Dec 2018	02 Dec 2018	19 Dec 2018
P&S ATR	02 Jan 2020	31 Jan 2020	15 Feb 2020	28 Feb 2020	15 Mar 2020

2) ATR Estimated Cost

Reviewer	ATR Pre AFB	ATR P&S	Cost
ATR Team Lead	\$5,000	\$4,000	\$9,000
Civil/Environmental Engineer	\$4,000	\$4,000	\$8,000
Plan Formulation	\$4,000	\$2,000	\$6,000
Cultural	\$2,000	\$1,000	\$3,000
Environmental Planning & Compliance	\$4,000	\$2,000	\$6,000
Cost	\$4,000	\$3,000	\$7,000
Economist	\$2,000	\$0	\$2,000
Geotechnical Engineer	\$2,000	\$2,000	\$4,000
H&H Engineer	\$4,000	\$3,000	\$7,000
Real Estate	\$2,000	\$2,000	\$4,000
TOTAL	\$33,000	\$23,000	\$56,000

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*Delair Division, Pike County, IL – Mississippi River Pool 24,
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C. Overall Estimated Review Schedule

Event	Kick-off	Reviewer Comments End	PDT Evaluation	Back Check	Complete
Feasibility DQC	01 Aug 2018	01 Sept 2018	15 Sept 2018	1 Oct 2018	18 Oct 2018
Pre-MDM ATR	21 Oct 2018	21 Nov 2018	01 Dec 2018	02 Dec 2018	19 Dec 2018
Pre-MDM Cost ATR	21 Oct 2018	21 Nov 2018	01 Dec 2018	02 Dec 2018	19 Dec 2018
MDM with MVD	04 Jan 2019	04 Feb 2019	15 Feb 2019	28 Feb 2019	14 Mar 2019
Public Review	14 Mar 2019	14 Apr 2019	14 May 2019	n/a	31 May 2019
Submit Final Report to MVD	31 May 2019	30 Jun 2019	14 Jul 2019	31 Jul 2019	31 July 2019
P&S DQC	01 Oct 2019	31 Oct 2019	15 Nov 2019	31 Nov 2019	15 Dec 2019
P&S ATR	02 Jan 2020	31 Jan 2020	15 Feb 2020	28 Feb 2020	15 Mar 2020

11. Public Participation

Public review will be in accordance with the UMRR PRP, Section VI.F.

12. Review Plan Approval and Updates

The Review Plan approval process will be in accordance with the UMRR PRP, Section VIII.B.

13. Review Plan Points of Contact

Questions and/or comments on this Review Plan can be directed to the following points of contact:

- Marvin Hubbell, UMRR Program Manager, 309-794-5428 – MVR
- Julie Millhollin, UMRR Project Manager, 309-794-5214 - MVR
- Nate Richards, Study Manager, 309-794-5286 – RPEDN
- Gabe Harris, Rock Island District Support Team, 601-634-5926 – MVD

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0

Attachment 1: Team Rosters For Feasibility Phase

Major Subordinate Command Roster – 2017

Name	Title	Contact
Gabe Harris, MVD	Rock Island District Support Team	William.G.Harris@usace.army.mil
Thatch Shepherd, MVD	Deputy Chief DST	Renee.N.Turner@usace.army.mil

Project Delivery Team Roster – 2017

Name	Agency/Org	Role	Contact Information
Jason Wilson	USFWS	Sponsor/Refuge Manager	573-847-2333 jason.wilson@fws.gov
Marvin Hubbell	MVR-PM-M	Program Manager	309-794-5428 marvin.e.hubbell@usace.army.mil
Julie Millhollin	MVR-PM-M	Project Manager	309-794-5214 julie.l.milhollin@usace.army.mil
Nathan Richards	MVP-PD-F	Study Manager	309-794-5286 nathan.s.richards@usace.army.mil
Chuck Theiling	MVP-PD	Biologist	309 794-5636 charles.h.theiling@usace.army.mil
Kayleigh Easter	MVR-PM-M	GIS	309 794-5217 kayleigh.a.easter@usace.army.mil
Lucie Sawyer	MVR-EC-HQ	Hydraulic Engineer	309-794-5836 lucie.m.sawyer@usace.army.mil
Kaileigh Scott	MVR-EC-HQ	Hydraulic Engineer	309 794-5318 kaileigh.c.scott@usace.army.mil
Elizabeth Bruns	MVR-EC-HQ	Water Quality	309-794-5762 elizabeth.a.bruns@usace.army.mil
Chris De Pooter	MVR-EC-TE	Cost Estimator	309-794-5052 christopher.j.depooter@usace.army.mil
Jason Appel	MVR-RE-P	Real Estate Specialist	309 794-5489 jason.c.appel@usace.army.mil
Mary Rodkey	MVR-PM-M	Writer/Editor	309-794-5499 mary.e.rodkey.@usace.army.mil
Randy Kinney	MVR-EC-G	Geotechnical Engineer	309-794-5843 randall.s.kinney@usace.army.mil
TBD	MVR-EC-DS	Structural Engineer	
Ron Deiss	MVP-PD-P	Archeologist	309 794-5185 ronald.w.deiss@usace.army.mil
Dan Johnson	MVR-EC-TS	Land Surveyor	309-794-5268 dan.j.johnson@usace.army.mil
Mark Pratt	MVR-EC-C	Construction	309 794-5474 mark.r.pratt@usace.army.mil
Rachel Fellman	MVR-EC-DN	Civil Engineer	309 794 5475 rachel.c.fellman@usace.army.mil
LaShell Harper	MVR-EC-DN	Engineering Technician	309 794-5359 lashell.l.harper@usace.army.mil
Steve Gustafson	MVR-EC-DN	HTRW	309-794-5202 stephen.j.gustafson@usace.army.mil
Matt Neumann	MVR-OC	Office of Council	309 794-5939 mellie.m.billingsley@usace.army.mil
Brunson Grothus	MVR-CT	Contract Specialist	309 794-5241 brunson.e.grothus@usace.army.mil

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
River Mile 278.0 – 281.0

District Quality Control Roster – 2017

Name	Department	Email/Phone
Marshall Plumley	PD-F	marshall.b.plumley@usace.army.mil 309-794-5447
Julie Millhollin	EC-DN	julie.l.milhollin@usace.army.mil 309-794-5214
Tom Kirkeeng	EC-HQ	thomas.a.kirkeeng@usace.army.mil 309-794-5433
Thomas Keller	EC-HQ	thomas.l.keller@usace.army.mil 309-794-5720
Steven Marruffo	EC-TE	steven.c.marruffo@usace.army.mil 309-794-5548
Jim Ross	PD-P	james.l.ross@usace.army.mil 309-794-5349
Diane Karnish	PD-E	diane.e.karnish@usace.army.mil 309-794-5006
Ron Silver	RE-P	ronald.silver@usace.army.mil 309-794-5506
Marvin Hubbell	PM-M	marvin.e.hubbell@usace.army.mil 309-794-5428
Charles Bishop	EC-G	charles.e.bishop@usace.army.mil 309-794-5561

Agency Technical Review Roster – 2017

Name	Department	District	Email/Phone
TBD	ATR Lead	NWK	TBD
TBD	Senior Plan Formulator with experience in large river ecosystem restoration projects.		TBD
TBD	Senior Environmental Planning and Compliance specialist with experience in large river ecosystem restoration projects.		TBD
TBD	Senior Cultural Resource Specialist		TBD
TBD	Senior Civil/Environmental Engineer with experience in large river ecosystem restoration projects.		TBD
TBD	Senior H&H Engineer with experience with 2-dimensional models.		TBD
TBD	Senior Economist with experience annualizing project costs and conducting CE/ICA for ecosystem restoration projects		TBD
TBD	Senior Geotechnical Engineer with experience in large riverine environments and groundwater interactions.		TBD
TBD	Senior Cost Estimator		TBD
TBD	Senior Real Estate Specialist with experience in Federal lands and MOU's.		TBD

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
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Attachment 2: Review Plan Revisions

Revision Date	Description of Change	Page/Paragraph Number
05 May 2017	Original RP Drafted	

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
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Attachment 3: UMRR Review Plan Checklist

MVD UMRR Review Plan Checklist

Date:	May 05, 2017
Originating District:	MVR
Project/Study Title:	UMRR-Delair Division Feasibility Report
P2# and AMSCO#:	335017
District POC:	Julie Millholin
MVD Reviewer:	

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 an UMRR Project?	Yes <input checked="" 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), and Agency Technical Review (ATR)?	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>	

REVIEW PLAN
Delair Division, Pike County, IL – Mississippi River Pool 24,
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<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>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>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:</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 checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>5. Does the RP address review of sponsor in-kind contributions?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>6. 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 comments using Dr Checks?</p> <p>Comments:</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>7. Does the RP address Policy Compliance and Legal Review?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

REVIEW PLAN

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<p>8. 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 include cost estimates for the reviews?</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>9. 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>10. Does the RP address opportunities for public participation?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>11. 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>12. Has the approval memorandum been prepared and does it accompany the RP?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

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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?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the Review Plan establish a milestone schedule aligned with the critical features of the project design and construction?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the RP identify any areas of risk and uncertainty associated with the use of the proposed models?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Does it indicate the certification/approval status of those models and if review of any model(s) will be needed?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. If needed, does the RP propose the appropriate level of review for the model(s) and how it will be accomplished?	d. Yes <input checked="" 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?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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?	Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/>

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7. Does the RP explain how the reviews will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP address the requirement to document ATR comments using Dr Checks 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>
8. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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Attachment 4: DQC Approval

**STATEMENT OF DISTRICT REVIEW FOR DECISION DOCUMENTS
COMPLETION OF DISTRICT QUALITY CONTROL**

District Quality Control (DQC) Review has been completed for the <type of product> for <project name and location>. DQC was conducted as defined in the project Review Plan to comply with the requirements of EC 1165-2-214. During the DQC, 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 U.S. Army Corps of Engineers policy. The Project Delivery team conducted a complete reading of the report and appendices to ensure coherence and consistency through the document. All comments resulting from the DQC have been resolved and closed in DrCheckssm.

SIGNATURE

Name
DQC Team Leader
Office Symbol

Date

SIGNATURE

Name
Project Manager
Office Symbol

Date

SIGNATURE

Name
Lead Planner
Office Symbol

Date

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CERTIFICATION OF DISTRICT QUALITY CONTROL

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 DQCR of the project have been fully resolved.

SIGNATURE

Name

Chief, Regional Planning and Environment
Division

Office Symbol

Date

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Attachment 5: ATR Approval

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the [product type & short description of item] for [project name and location]. 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 U.S. Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the employed DQC activities 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]

Date

ATR Team Leader

[Office Symbol or Name of AE Firm]

SIGNATURE _____

[Name]

Date

Project Manager (home district)

[Office Symbol]

SIGNATURE _____

[Name]

Date

Architect Engineer Project Manager¹

[Company, location]

SIGNATURE _____

[Name]

Date

Review Management Office Representative

[Office Symbol]

¹ Needed only if some portion of the ATR was contracted

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CERTIFICATION OF AGENCY TECHNICAL REVIEW

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

[Describe the major technical concerns and their resolution and specifically list any agreed-upon deferrals to be completed in the next phase of work.]

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 Division² (home district)
[Office Symbol]

Date

Add appropriate additional signatures (Operations, Construction, AE principal for ATR solely conducted by AE, etc) and/or modify to accommodate local organizational structure.

² Decision Documents Only.