

20 June 2016
S. Gustafson

CEMVR-EC-DN

MEMORANDUM FOR RECORD

SUBJECT: Routine Inspection Stoplogs, Stabilization and Stilling Basins; Fox Island Division HREP, Mississippi River, River Miles 353.6 – 358.5, Clark County, MO.

An initial inspection of the Fox Island Division Habitat Rehabilitation and Enhancement Project (HREP) was conducted on June 9, 2016 by Steve Gustafson, Environmental Engineering Section, US Army Corps of Engineers, Rock Island District. (CEMVR-EC-DN).

Features of the HREP that were inspected included Stoplogs A, B, C, D and E, Water Well G and H stilling basins, stream stabilization riprap at Stoplog C, and levee improvements along the Mississippi-Fox Levee. The features were inspected according to the subject HREP Operation and Maintenance (O&M) Manual, dated March 2016, specifically Appendix D, Routine Inspection Checklists.

Completed inspection checklists from the templates provided in the O&M Manual are included as Attachment A to this MFR. Corresponding photos referenced in the inspection checklists are included as Attachment B.

Steve Gustafson, P.G.
Environmental Engineering Section

CF:
EC-DN (Stephens)
PW (\Civil Works\Mississippi River Basin\Fox Island EMP\06_Performance Evaluation Report\)

FOX ISLAND HREP
2016 INSPECTION

ATTACHMENT A

PART 1: STREAMBANK EROSION CONTROL CHECKLIST

Inspected by: Steve Gustafson, CEMVR-EC-DN

Date: June 9, 2016

Type of Inspection:

- | | |
|--------------|---------------|
| 1. Annual | <u>X</u> |
| 2. Emergency | <u> </u> |
| 3. Other | <u> </u> |

The following conditions are potential problem areas for streambank protection areas and should be checked during inspections:

- Embankment eroding from under the riprap
- Woody vegetation growing through the riprap
- Displaced riprap
- Significant deterioration of the riprap

List any discrepancies found on the inspection and corrective action taken.

None.

Routine Inspection Checklists

Location/Station	Stone Protection	Erosion	Debris	Vegetation	Unauthorized Changes	Remarks
Mississippi-Fox Levee	No apparent movement, spalling, or deterioration.	None observed.	Yes.	Minimal weeds.	No	Some weedy vegetation in riprap. 3 or 4 fallen trees and associated trees observed. Photos #'s 24, 25, 26.
Upstream of Stoplog C	No apparent movement, spalling, or deterioration.	None observed.	No.	Moderate amount.	No.	Photo #'s 10 and 11.

PART 2: STOPLOGS AND STILLING BASINS CHECKLIST

Inspected by: Steve Gustafson

Date: June 9, 2016

Type of Inspection:

- | | |
|--------------|---------------|
| 1. Annual | <u> x </u> |
| 2. Emergency | <u> </u> |
| 3. Other | <u> </u> |

The following conditions are potential problem areas for streambank protection areas and should be checked during inspections:

- Embankment eroding from under the riprap
- Woody vegetation growing through the riprap
- Displaced riprap
- Significant deterioration of the riprap
- Debris blocking the stoplog grate

List any discrepancies found on the inspection and corrective action taken.

None.

Routine Inspection Checklists

Location/ Station	Stone Protection	Erosion	Debris	Vegetation	Remarks
Stoplog A	No apparent movement, spalling, or deterioration.	Some along edge of concrete.	None.	None.	Photo #'s 1, 2, 3.
Stoplog B	No apparent movement, spalling, or deterioration.	Along edge of concrete.	Minor	None.	Photo #'s 4, 5, 6. Large log upstream gate.
Stoplog C	No apparent movement, spalling, or deterioration.	None.	None.	Moderate on upstream gate.	Photo #'s 7, 8, 9. Significant sedimentation on upstream side of structure, vegetation establishing.
Stoplog D	Some movement on LBD upstream side.	Significant on LBD upstream. Moderate along edge of concrete.	Minor.	None.	Photo #'s 12, 13, 14, 15, 16.
Stilling Basin at Well H	No apparent movement, spalling, or deterioration.	None.	None.	None.	Photo #'s 17, 18, 19.
Stoplog E	No apparent movement, spalling, or deterioration.	None.	Moderate amount on upstream gate.	Minor.	Photo #'s 23, 24, 25. Campfire on top of concrete. Sediment/vegetation on upstream gate.
Stilling Basin at Well G	No apparent movement, spalling, or deterioration.	None.	None.	Moderate.	Photo #'s 20, 21, 22.

FOX ISLAND HREP
2016 INSPECTION

ATTACHMENT B

Photo #1 – Stoplog A, upstream gate.



Photo #2 – Stoplog A, edge of riprap/concrete apron.



Photo #3 – Stoplog A, downstream gate.



Photo #4 – Stoplog B, upstream gate, debris in front of gate.



Photo #5 – Stoplog B, erosion at edge of riprap/concrete apron.



Photo #6 – Stoplog B, downstream gate.



Photo #7 – Stoplog C, downstream gate.



Photo #8 – Stoplog C, riprap/concrete apron and railing.



Photo #9 – Stoplog C, upstream gate. Sediment deposition and vegetation growth.



Photo #10 – Riprap upstream of Stoplog C. Moderate vegetation in riprap.



Photo #11 – Riprap downstream of Stoplog C. Some vegetation present.



Photo #12-Stoplog D, left descending bank erosion, upstream of stoplog.



Photo #13-Stoplog D, upstream gate, bank erosion in background.



Photo #14-Stoplog D, erosion on edge of riprap/concrete apron.



Photo #15 – Stoplog D, debris in railing.



Photo #16 – Stoplog D, downstream gate, some erosion on either side.



Photo #17 – Well H stilling basin.



Photo #18 – Well H stilling basin looking downstream.



Photo #19 – Well H stilling basin looking downstream.



Photo #20 - Well G stilling basin.



Photo #21 – Well G stilling basin.



Photo #22 – Well G stilling basin.



Photo #23 – Stoplog E, upstream gate. Sediment deposition and vegetation on concrete.



Photo #24 – Stoplog E, riprap/concrete apron. Evidence of campfire.



Photo #25 – Stoplog E, downstream outlet.



Photo #26 – Mississippi Fox levee improvement area. Minor vegetation.



Photo #27 - Mississippi Fox levee improvement area. Minor debris.



Photo #28- Mississippi Fox levee improvement area. Tree fall.

