



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

November 21, 2019

Operations and Technical Support Section

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Alan A. Fuchs, P.E.
NYSDEC – Division of Water
Bureau of Flood Protection & Dam Safety
625 Broadway
Albany, NY 12233-3504

Dear Mr. Fuchs:

Transmitted herewith is the FY19 Inspection of Completed Works (ICW) inspection report for the Flood Risk Management Project at Genesee River and Dyke Creek, Wellsville, New York. Thank you for your agency's participation in this inspection. The Right Bank levee system is rated **"MINIMALLY ACCEPTABLE" (M)**. The Left Bank and Channel and the Dyke Creek levee systems are both rated **"UNACCEPTABLE" (U)**. All three systems for this project are currently **"ACTIVE"** in the USACE Rehabilitation Program.

Please refer to the enclosed for the Summaries of Deficiencies and Recommendations of all three systems. Also enclosed is the Flood Risk Management System Inspection Report, which includes the following:

- a. Descriptions of Individual Item Ratings, Overall System Ratings, and the Eligibility for PL 84-99 Rehabilitation Assistance,
- b. Descriptions of project deficiencies requiring corrective action, if any,
- c. Sponsor required Public Sponsor Pre-Inspection Form to be completed prior to the next scheduled inspection and provided to the USACE inspector upon arrival.

Please keep this office informed if there are any changes to the project that would affect the design level of protection afforded by the project or if there are other changes which may alter or impact any project features. Such changes require prior Section 408 written permission from USACE and no objection from NYSDEC.

Questions pertaining to this matter should be directed to the undersigned, who can be contacted in writing at the above address, by telephone at 716-879-4277 or by e-mail at robert.w.remmers@usace.army.mil.

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Sincerely,

Robert W. Remmers, P.E., PMP
Levee Safety Program Manager
Chief, Operations and Technical Support Section

Enclosure:

CF's:

Theodore Myers, NYSDEC Regional Flood Control Engineer – Region 9 (e-copy)
Stephen Len, NYSDEC – Division of Water, Flood Control Project Unit (e-copy)
Douglas Winner, NYS Office of Emergency Management – Region V – Western NY (e-copy)
Alan Springett, FEMA – Region II (e-copy)
Shudipto Rahman, FEMA – Region II (e-copy)
Jeff Luckey, Allegany County Office of Emergency Management (e-copy)
Bill Whitfield, Village of Wellsville (e-copy)
Jacob Nienaber, USACE – CELRD (e-copy)

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1. **OBJECTIVE:** The objective of this inspection is to assure project sponsor compliance with existing agreements, evaluate effectiveness of the sponsor to operate and maintain facilities constructed by the United States in accordance with the Operations and Maintenance (O&M) manual, and to determine if the sponsor has adequately met standards required to maintain eligibility for PL 84-99 Federal rehabilitation assistance should the project be damaged by flooding or a storm event.
2. **PROJECT CLASSIFICATION:** Flood Risk Management – Levee
3. **REPORTING PERIOD:** 09/24/18 – 09/23/19
4. **INSPECTION TEAM:** The inspection team met at the project site on 09/23/19. The following representatives participated in this inspection.

<u>Name</u>	<u>Organization</u>	<u>Email</u>
Robert Remmers	USACE – Buffalo District	(716) 879-4277
Jason Doktor	USACE – Buffalo District	(716) 879-4385
James Rogers	USACE – Buffalo District	(716) 879-4118
Theodore Myers	NYSDEC – Region 9	(716) 851-7070
Kerrie O’Keeffe	NYSDEC – Region 9	(716) 851-7102
Sarah Cope	NYSDEC – Region 9	(585) 307-7295
Greg Stagg	NYSDEC – Operations	(716) 998-1389
Joel Warner	NYSDEC – Operations	(716) 372-9594
Bill Whitfield	Village of Wellsville	(585) 610-8227

5. **OVERALL PROJECT RATING:** This Flood Risk Management Project has three levee systems: Left Bank and Channel, Right Bank, and Dyke Creek. In accordance with USACE – Headquarters guidance, the Right Bank levee system is rated “**Minimally Acceptable**” (M); the Left Bank and Channel and the Dyke Creek levee systems are both rated “**Unacceptable**” (U). These ratings were given because of significant shoaling, trees and heavy vegetation on channel side slopes, and conduit inspections not being completed within the required 5-year timeframe (past due date of 01/10/19). Specific deficiencies are discussed in Section 7 of this report. All deficiencies shall be addressed in a timely manner.

In accordance with USACE – Headquarters guidance, 5-year conduit inspection is a component of the Culverts/Discharge Pipes rating on the Program Eligibility Determination Checklist. The lack of videotape inspection requires this item to be rated “Unacceptable” and consequently the project would normally be “INACTIVE” in the USACE Rehabilitation Program. However, since there are no other “Unacceptable” levee rated items, the sponsor is actively pursuing completion of the pipe inspections, and the conduits were previously rated either “A” or “M”, USACE will allow an extension for this requirement until the date of the FY20 routine inspection. This date has not been determined but can be expected to occur in Summer of 2020. If videotape inspections are not completed by the time of the next inspection, the levee systems will be made “INACTIVE” in the USACE Rehabilitation Program. With that said, these levee systems are currently “**ACTIVE**” in the USACE Rehabilitation Program.

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Rehabilitation Program status is based only on the rated items for the levee system and not the channel-rated items. A levee system is “ACTIVE” in the Rehabilitation Program if all the rated items on the Rehabilitation Program Eligibility Determination Checklist are rated either “Acceptable” (A) or “Minimally Acceptable” (M).

Prior to this evaluation, the project was last inspected on 09/24/18. The condition of the project at that time of the inspection was rated as “Unacceptable” (U) and the project was “ACTIVE” in the USACE Rehabilitation Program.

6. PROJECT LOCATION, DESCRIPTION, AND LOCAL SPONSOR:

a.) **Project Location:** The project is located along the Genesee River and Dyke Creek in the Village and Town of Wellsville, New York. The project extends along the Genesee River from about 2,700 feet downstream of the Bolivar Road Bridge to 4,900 feet upstream of the confluence with Dyke Creek. The project limits along Dyke Creek extend from the confluence with the Genesee River to about 4,025 feet upstream.

b.) **Project Description:** The project consists of channel improvements, levees, drop structures, weirs, concrete lined channels, and interior drainages structures. The Genesee River was deepened to provide a uniform grade with bottom widths of 100 to 135 feet downstream of Dyke Creek and 100 to 160 feet wide upstream of Dyke Creek. A major realignment was made upstream of Bolivar Road to eliminate two sharp curves along with other realignments to ease lesser curves. A concrete drop structure was constructed between Bolivar and Pearl Streets. Steel sheet pile weirs were constructed at the upper end of the project. Low levees were constructed along the Genesee River on the right bank, and along the left bank between Chamberlain Street and Stevens Street, between State Street and West Dyke Street, and at the upstream limit of the project. The Dyke Creek channel was deepened with a bottom width of 50 to 70 feet, with a drop structure at Miller Street. A levee was constructed along the left bank of Dyke Creek, upstream of Miller Street. Existing drainage facilities throughout the project were altered to provide better entrances into the improved channel and to prevent backflow at high river stages. The project was designed to alleviate flooding within the Village and Town of Wellsville.

The original project was completed in 1958 and additional bank protection added later in 1958 and 1959. In 1972, the runoff from Tropical Storm Agnes caused extensive damage to the project and restoration work was completed in September 1972. Rectification work was undertaken in 1973 and again in 1976. NYSDOT added additional bank protection in 1974 in conjunction with the relocation of 1,900 feet of the river. An emergency rehabilitation project was completed in 1997 to repair damages from a damaging flood in 1996. Repairs were made along the left bank of the Genesee River, between State Street and barrier levee upstream of West Dyke Street, and along the left bank of Dyke Creek, between Broad Street and the upstream limit of the project.

c.) **Local Sponsor:** In accordance with the project O&M Manual, NYSDEC – Region 9 is the local sponsor of the project and has assumed responsibility for the operation and maintenance of the project.

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7. **INSPECTION FINDINGS:** Refer to the attachments located in Section 16 for inspection findings, rated items, photographs, and additional project information.

8. **SUMMARY OF MAINTENANCE REQUIRED BY LAST INSPECTION REPORT:**

(1) See FY18 Inspection Report (inspection date 09/24/18).

9. **SUMMARY OF MAINTENANCE PERFORMED AFTER LAST INSPECTION:**

(1) The sponsor has completed the following maintenance: routine mowing, removal of vegetation from riprap near the State Street Bridge, and pipe repairs.

(2) Refer to Attachment “N” – Public Sponsor Pre-Inspection Report for a detailed account of maintenance performed since the time of last inspection.

10. **SUMMARY OF CHANGES TO PROJECT SINCE LAST INSPECTION:**

(1) The Village of Wellsville has started the construction of the River Walk Trail extension under the Bolivar Road Bridge.

(2) The sponsor has completed the construction of two gate wells and the rehabilitation of five conduits along the Left Bank levee system.

11. **PROBLEMS/ISSUES REQUIRING ASSISTANCE OF USACE:**

(1) Project Alterations: An alteration is a new or existing change (including encroachments) to a Federally-constructed, locally operated and maintained project, within the project’s permanent easements. In accordance with 33 U.S.C. 408, all alterations must be reviewed and granted permission by USACE. Requests for alterations are initiated by the “Requestor”, who can be any project stakeholder; including the sponsor, general public, or any other interested party. Sponsors must endorse requests from third party entities and ensure that proper operation and maintenance of the alteration is followed. To make an alteration request, the sponsor is required to submit a USACE Buffalo District “Section 408 Request Form”; to include design criteria, as-built drawings, operations and maintenance requirements, and other pertinent documents and information. An electronic version of the form may be obtained by contacting the USACE Buffalo District Levee Safety Program Manager. This form may be used for either existing or new (proposed) alteration requests. Use one form for each unique alteration type. Similar alterations may be combined on one form. New alterations shall be granted permission in advance of the work.

For existing unauthorized alterations, an after-the-fact review will be required by USACE for each change to determine whether or not that permission will be granted or correction/removal will be required. A rating of “M” or “U” will be assigned to existing unauthorized alterations under the “encroachments” item on the checklist, depending on potential impacts to the functioning of the project, until either permission has been granted

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by USACE or the alteration is removed/corrected. If any of the cited alterations have been previously approved by USACE, the local sponsor shall submit approval documentation as proof.

- a.) The following project alteration requests have been submitted by the sponsor and granted permission by USACE:
 - i. Route 417 Bridge replacement over Dyke Creek.
 - ii. Drainage swale berm at former Sinclair Refinery lagoon (granted 09/07/10).
 - iii. Gate Well Installations along Genesee River (granted 02/28/18).
 - iv. River Walk Trail under Bolivar Road Bridge (granted 03/04/19).

(2) Videotaping of Pipe Inspections: The non-federal sponsor did not conduct the required pipe videotape inspection by the due date of 01/10/19. Therefore, the six pipes through the Left Bank and Channel levee system and the two pipes through the Dyke Creek levee system have been rated “Unacceptable” and consequently the pipes and any impacted project features will be ineligible for assistance under PL 84-99 should project damage occur in this location.

(3) Where the Chamberlain ditch discharges into the Genesee River, the project was constructed with an apparent gap in levee protection between the left bank levee and high ground. Flooding in this area during a large storm event should be evaluated for determination of the potential risks and consequences.

(4) Approximately 60 feet of the northeast end of the right bank barrier levee was removed to construct a road leading to a recycling plant located to the southeast; date of construction is unknown Flooding in this area during a large storm event should be evaluated for determination of the potential risks and consequences.

12. ADDITIONAL OBSERVATIONS:

(1) The Genesee River and Dyke Creek channels are generally clear of debris and obstructions, however, most of the riprap areas within the project are covered with heavy vegetation making it difficult to impossible to assess the condition of the riprap, levees, pipes, and channel sideslopes.

(2) Significant areas of shoaling were present during the inspection.

(3) Vegetation in riprap, within the levee prism, has started to impede the inspection of the levee waterside slope. Inability to fully inspect the levee prism will have a negative impact on the rated items of the Rehabilitation Program Eligibility Determination Checklist. This could result in a change of status in the PL 84-99 Rehabilitation Program.

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13. RECOMMENDATIONS AND MAINTENANCE REQUIRED AS A RESULT OF THIS INSPECTION:

- (1) See Attachments “A”, “E”, and “I” for each levee system’s summary of deficiencies and recommendations.
- (2) Sponsor needs to conduct pipe videotape inspections and provide an assessment report to USACE as soon as possible, but by no later than the FY20 inspection.
- (3) USACE recommends the removal of vegetation from riprap where specified in the Flood Damage Reduction System Inspection Reports. First priority should be any riprap that is part of the levee prism.

14. INSPECTION REPORT PREPARED BY:

James M. Rogers
Civil Engineer
Operations and Technical Support Section

15. INSPECTION REPORT REVIEWED BY:

Robert W. Remmers, P.E., PMP
Levee Safety Program Manager
Chief, Operations and Technical Support Section

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16. LIST OF ATTACHMENTS:

Attachment “A” – Left Bank Levee and Channel: Summary of Deficiencies and Recommendations

Attachment “B” – Left Bank Levee and Channel: Flood Damage Reduction System Inspection Report

Attachment “C” – Left Bank Levee and Channel: Levee Inspection Map

Attachment “D” – Left Bank Levee and Channel: Rehabilitation Program Eligibility Determination Checklist

Attachment “E” – Right Bank Levee: Summary of Deficiencies and Recommendations

Attachment “F” – Right Bank Levee: Flood Damage Reduction System Inspection Report

Attachment “G” – Right Bank Levee: Levee Inspection Map

Attachment “H” – Right Bank Levee: Rehabilitation Program Eligibility Determination Checklist

Attachment “I” – Dyke Creek Levee: Summary of Deficiencies and Recommendations

Attachment “J” – Dyke Creek Levee: Flood Damage Reduction System Inspection Report

Attachment “K” – Dyke Creek Levee: Levee Inspection Map

Attachment “L” – Dyke Creek Levee: Rehabilitation Program Eligibility Determination Checklist

Attachment “M” – Project Map

Attachment “N” – Public Sponsor Pre-Inspection Form

Attachment “A” – Left Bank Levee and Channel: Summary of
Deficiencies and Recommendations

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Project: Genesee River - Left Bank and Channel, Wellsville

Inspect ID	Rating	Deficiency	Recommendations	Photo #	Category	Rated Item	Due Date	Station 1	Station 2
1	M	Tree debris on right bank at upstream limit weir.	Remove tree debris.	01_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/18 (FY16)	0+00	NA
2	U	Trees and vegetation in riprap on left bank upstream and downstream of upstream limit weir.	Remove trees and vegetation from riprap.	02_1.jpg 02_2.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	0+00	0+00
3	U	Trees and vegetation on right bank sideslope from 400' downstream of upstream limit weir to upstream limit weir.	Remove vegetation.	03_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)	0+00	0+00
4	U	Significant vegetated shoal (S-11) and trees in channel on right bank from 100'-700' downstream of upstream limit weir.	Remove shoaling.	04_1.jpg 04_2.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	0+00	NA
5	U	Trees and vegetation on left bank 175' upstream of barrier levee weir.	Remove trees and mow vegetation to 3"-6" height.	05_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)	0+00	NA
6	M	Woody vegetation in riprap on left bank from barrier levee weir to 550' downstream.	Remove woody vegetation from riprap.	06_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/19 (FY17)	6+00	0+00
7	M	Minor shoaling (S-10) downstream of barrier levee weir.	Remove shoal.	07_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/18 (FY16)	3+00	NA
10	M	Trees and vegetation on right bank from Island Park to 500' upstream of Island Park pedestrian bridge.	Remove trees and vegetation.	10_1.jpg 10_2.jpg 10_3.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/18 (FY16)	29+00	11+00
11	M	Trees and vegetation in riprap on left bank around both sides of Island Park Pedestrian Walkway Bridge	Remove trees and vegetation from riprap.	11_1.jpg 11_2.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/20 (FY18)	17+00	16+00
12	M	Shoal (S-9) along left bank toe from 450' downstream of Island Park pedestrian walkway bridge to Island Park Pedestrian Walkway Bridge.	Remove shoaling.	12_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	17+00	21+00
17	M	Grassy shoal (S-1) along right bank from 225' to 700' downstream of golf course pedestrian bridge.	Remove shoaling.	17_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	111+00	106+00
18	M	Vegetation in excess of 12" on right bank of channel just downstream of golf course pedestrian bridge.	Mow vegetation to 3"-6" height.	18_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)	104+00	106+00
19	M	Vegetation in excess of 12" on left bank of channel just downstream of golf course pedestrian bridge.	Mow vegetation to 3"-6" height.	19_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/19 (FY17)	105+00	104+00
21	M	Vegetation in excess of 12" on right bank of channel from golf course pedestrian bridge to Bolivar Road bridge.	Mow vegetation to 3"-6" height.	21_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)	103+00	101+00
22	M	Four alternating vegetated shoals (S-2, S-3, S-4, S-5) on both banks from green golf course pedestrian bridge to Bolivar Road Bridge.	Remove shoals.	22_1.jpg 22_2.jpg 22_3.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	103+00	92+00
23	M	Erosion at two outfalls on left bank, 400' upstream of pedestrian bridge.	Repair erosion.	23_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/18 (FY16)	100+00	NA
24	M	Trees on right bank channel sideslope 900' downstream of Bolivar Street bridge.	Remove trees.	24_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/18 (FY16)	100+00	NA
25	M	Vegetation in excess of 12" on left bank of channel from golf course pedestrian bridge to Bolivar Road bridge.	Mow vegetation to 3"-6" height.	25_1.jpg 25_2.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/19 (FY17)	104+00	103+00
27	M	Vegetation in excess of 12" on right bank of channel 280' downstream from Bolivar Road Bridge.	Mow vegetation to 3"-6" height.	27_1.jpg 27_2.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	NA	94+00	NA
28	M	Trees and vegetation in riprap on right bank around both sides of Bolivar Road bridge.	Remove trees and vegetation from riprap.	28_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	91+00	91+00
29	M	Side slope erosion along left bank toe starting at Bolivar Road bridge and continuing 425' downstream.	Repair erosion.	29_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/19 (FY17)	96+00	91+00
34	M	Joint connections improperly repaired and lower support pole for handrail is no longer anchored to headwall on left bank, 300' upstream of Bolivar Road bridge.	Properly repair headwall railing.	34_1.jpg 34_2.jpg	Interior Drainage System	Fencing and Gates	12/31/17 (FY15)	88+00	NA
36	M	Unauthorized alteration (E-5): River Walk Trail kiosk on left bank channel crest.	Submit Section 408 Alteration Request to USACE.	36_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/18 (FY16)	85+00	NA
38	M	Shoaling (S-6) along right bank from 750' to 1,300' upstream of Bolivar Road bridge (near plaza).	Remove shoaling.	38_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	83+00	78+00
40	M	Lower support pole for handrail is bent and no longer anchored to headwall on left bank, 900' upstream of Bolivar Road bridge.	Properly repair headwall railing.	40_1.jpg	Interior Drainage System	Fencing and Gates	12/31/20 (FY18)	82+00	NA



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Project: Genesee River - Left Bank and Channel, Wellsville

43	M	24" CMP outfall on left bank 1,600' upstream of Bolivar Road bridge is approx. 20% obstructed by vegetation and sediment.	Remove vegetation and sediment obstructions.	43_1.jpg	Interior Drainage System	Vegetation and Obstructions	12/31/17 (FY15)	75+00	NA
44	M	Unwanted vegetation on both bank sideslopes from 750' upstream of Bolivar Road bridge to Madison Street bridge.	Remove unwanted vegetation.	44_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)	84+00	44+00
49	U	Vegetation in left bank riprap from Drop Structure to 500' downstream.	Remove vegetation from riprap.	49_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	72+00	66+00
52	A	Observation: Chamberland Street drainage ditch creates apparent gap in line of protection on left bank levee (project built this way).	Recommendation: evaluate the possibility of altering the project to improve a continuous line of protection; potentially include a pipe and flapgate.	52_1.jpg	Levee Embankments	Depressions/ Rutting	12/31/17 (FY15)	69+00	NA
55	M	Vegetation in excess of 12" on left bank levee waterside slope from Chamberland Street drainage channel to Madison Street bridge.	Mow vegetation to 3"-6" height.	55_1.jpg 55_2.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/19 (FY17)	67+00	66+00
56	M	Vegetation in riprap on both banks around drop structure.	Remove vegetation in riprap.	56_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	66+00	NA
57	U	Trees and vegetation in riprap on left bank channel side slope from Drop Structure to 1,000' upstream.	Remove trees and vegetation from riprap.	57_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	65+00	52+00
60	M	9 trees and 1 tree stump within 15' of levee landside toe 1,600' downstream of Madison Street (Stevens Street) bridge (60, 68, & 70 Seneca Street).	Remove trees and tree stump.	60_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/17 (FY15)	61+00	58+00
63	M	Trees and vegetation in riprap on right bank from 1,600' to 1,300' downstream of Madison Street (Stevens Street) bridge.	Remove trees and vegetation from riprap.	63_1.jpg 63_2.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	59+00	56+00
64	M	Shoal (S-7) on left bank toe, not part of as-built project (189-WEL-2/5).	Remove Shoal.	64_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/18 (FY16)	60+00	56+00
65	M	Animal burrow in left bank levee crest at 52 Chamberlain Street.	Improve animal control and fill animal burrow.	65_1.jpg	Levee Embankments	Animal Control	12/31/20 (FY18)	58+00	NA
72	M	Trees on left bank landside slope and within 15' of landside toe from 1,200' downstream of Madison Street (Stevens Street) bridge to Ponding Area fence.	Remove trees.	72_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/17 (FY15)	54+00	46+00
74	U	24" RCP on left bank, 1,000' downstream of Madison Street (Stevens Street) bridge. Unacceptable pipe based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.		Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately	53+00	NA
77	M	Unwanted vegetation within 15' of levee landside toe.	Remove unwanted vegetation.	77_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/19 (FY17)	53+00	NA
81	M	Trees and vegetation on ponding area fence.	Remove trees and vegetation.	81_1.jpg	Interior Drainage System	Fencing and Gates	12/31/17 (FY15)	50+00	47+00
83	U	Two 36" CMP, at Gatewell #4, 550' downstream of Madison Street (Stevens Street) bridge. Both are Unacceptable based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.		Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately	50+00	NA
86	M	Minor shoaling (S-8) along left bank channel toe from 600' downstream of Madison Street (Stevens Street) bridge to State Street bridge.	Remove shoaling.	86_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	49+00	0+00
95	M	Trees on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.	Remove trees.	95_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)	46+00	44+00
98	M	Culvert on right bank, 280' upstream of the Madison Street Bridge, is causing an erosion pocket at the top of the concrete line channel.	Repair erosion pocket and protect channel side slope from culvert discharge.	98_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/21 (FY19)	39+00	NA
103	M	Unwanted vegetation on left bank from State Street Bridge to 400' downstream.	Mow vegetation to 3"-6" height.	103_1.jpg 103_2.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)	37+00	NA
106	M	Minor shoal along right bank channel toe just downstream of State Street Bridge.	Remove shoal.	106_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/21 (FY19)	D 0+00	35+00
108	U	Trees and vegetation in riprap on left bank channel side slope from State Street bridge to 1,250' upstream.	Remove trees and vegetation from riprap.	108_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Bank Protection	12/31/17 (FY15)	33+00	24+00
111	M	Multiple animal burrows (approx. half dozen) on left bank waterside slope 450' upstream of State Street bridge.	Fill animal burrows and improve animal control program.		Levee Embankments	Animal Control	12/31/17 (FY15)	28+00	NA
121	U	36" CMP on left bank, 475' upstream of Steel Sheet Pile Weir. Unacceptable pipe based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.	121_1.jpg	Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately	23+00	NA



128	NA	Observation: 48" CMP on levee landside slope, 515' upstream of Steel Sheet Pile Weir, does not have a trash rack to prevent unauthorized access into pipe.	Recommendation: installing trash rack over opening to keep out debris and unauthorized access.	128_1.jpg	Interior Drainage System	Trash Racks (non-mechanical)	NA	23+00	NA
129	U	48" CMP on left bank, 515' upstream of Steel Sheet Pile Weir. Unacceptable pipe based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.	129_1.jpg	Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately	23+00	NA
132	U	24" CMP on left bank 325' upstream of Island Park Pedestrian Walkway Bridge. Unacceptable pipe based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.	132_1.jpg	Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately	13+00	NA
133	M	Vegetation in excess of 12" on left bank of levee, 400' upstream of pedestrian bridge.	Mow vegetation to 3"-6" height.	133_1.jpg 133_2.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/19 (FY17)	13+00	NA
139	U	Trees and vegetation in riprap on right bank from barrier levee weir to 500' upstream of barrier levee weir.	Remove trees and vegetation from riprap.	139_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	0+00	0+00
140	U	Vegetation in riprap on right bank from 400' downstream of upstream limit weir to barrier levee weir.	Remove vegetation from riprap.	140_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	4+00	0+00
143	U	Significant vegetated shoaling (S-12) on right bank from 50' to 225' upstream of upstream limit weir.	Remove shoaling.	143_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)	0+00	0+00
144	U	Trees and vegetation in riprap on right bank from upstream limit weir to 300' upstream.	Remove trees and vegetation from riprap.	144_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)	0+00	0+00
146	U	Significant vegetated shoaling (S-13) with trees in center of channel just upstream of upstream limit weir.	Remove shoaling.	146_1.jpg 146_2.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/18 (FY16)	0+00	NA
150	M	Depression within levee crown over unauthorized 24" CMP outfall.	Fill and repair depression in levee crown; determine cause of depression and rectify problem.	150_1.jpg	Levee Embankments	Settlement	12/31/19 (FY17)	61+00	NA



SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Genesee River - Left Bank and Channel, Wellsville

Unauthorized Alterations

Inspect ID	Rating	Deficiency	Recommendations	Photo #	Category	Rated Item	Due Date	Station 1	Station 2
16	M	Unauthorized alteration (E-2): Green golf course pedestrian bridge 1,250' downstream of Boliver Road bridge. NYSDEC says permitted (need to verify).	Submit Section 408 Alteration Request to USACE.	16_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	104+00	NA
20	M	Unauthorized alteration (E-1): new pump station building, riprap, intake pipe to pump station, and feeder pipes for golf course water just downstream of pedestrian bridge.	Submit Section 408 Alteration Request to USACE.	20_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	104+00	NA
26	M	Unauthorized alteration (E-3): riprap on right bank toe from 300' upstream of pedestrian bridge to 300 feet downstream of Bolivar Street bridge.	Submit Section 408 Alteration Request to USACE.	26_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	100+00	93+00
33	M	Unauthorized alteration (E-4): River Walk Trail encroachment (benches and lightposts are not encroachments) along left bank from Bolivar Road Bridge to 1,775 feet upstream of Bolivar Road Bridge.	Submit Section 408 Alteration Request to USACE.	33_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	90+00	76+00
35	M	Unauthorized alteration (E-6): 42" outfall on left bank 300' upstream of Bolivar Road bridge. NYSDEC says permitted.	Submit Section 408 Alteration Request to USACE or verify USACE permission.	35_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	88+00	NA
37	M	Unauthorized alteration (E-47a): Riprap added to left bank channel toe.	Submit Section 408 Alteration Request to USACE.	37_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/19 (FY17)	84+00	68+00
39	M	Unauthorized alteration (E-7): 42" outfall on left bank 900' upstream of Bolivar Road Bridge at plaza. NYSDEC says permitted.	Submit Section 408 Alteration Request to USACE or verify USACE permission.	39_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	82+00	NA
41	M	Unauthorized alteration (E-8): pet sign and post encroachment on left bank channel crest.	Remove or submit Section 408 Alteration Request to USACE.	41_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	77+00	NA
42	M	Unauthorized alteration: 24" CMP encroachment on left bank 1,600' upstream of Bolivar Road bridge (just downstream of access drive).	Submit Section 408 Alteration Request to USACE.	42_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/20 (FY18)	75+00	NA
45	M	Unauthorized alteration (E-10): asphalt access drive and gate on left bank just downstream of Seneca Street.	Submit Section 408 Alteration Request to USACE.	45_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	75+00	NA
47	M	Unauthorized alteration (E-12): guy wire for utility pole on left bank channel crest at Seneca Street (utility pole not an encroachment).	Submit Section 408 Alteration Request to USACE.	47_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	73+00	NA
48	M	Unauthorized alteration (E-9): stone along left bank channel crest at 82 Seneca Street.	Remove or submit Section 408 Alteration Request to USACE.	48_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/19 (FY17)	71+00	NA
50	M	Unauthorized alteration (E-13): misc. landscaping timbers at 92 Seneca Street.	Remove or submit Section 408 Alteration Request to USACE.	50_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	72+00	69+00
51	M	Vegetation obstructions in Chamberlain Street drainage ditch to river.	Remove vegetation obstructions.	51_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	69+00	NA
59	U	Unauthorized alteration (E-15a): 24" CMP outfall with flap gate encroachment through levee. Flap gate stuck in open position. Pipe has not been videotaped.	Remove or submit Section 408 Alteration Request to USACE. Videotape pipe. Close flap gate and check seal.	59_1.jpg 59_2.jpg	Interior Drainage System	Encroachments	12/31/19 (FY17)	61+00	NA
61	M	Unauthorized alteration (E-15): landscaping timbers and debris on landside slope at 70 Chamberlain Street on left bank 1,700' downstream of Madison Street (Stevens Street) bridge.	Remove or submit Section 408 Alteration Request to USACE.	61_1.jpg 61_2.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	60+00	NA
62	M	Unauthorized alteration (E-17): red metal shed and debris at 60 Chamberlain Street on left bank 1,600' downstream of Madison Street (Stevens Street) bridge (60 Chamberlain Street).	Remove or submit Section 408 Alteration Request to USACE.	62_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	59+00	NA
66	M	Unauthorized alteration (E-19): utility line potentially buried in levee section from 70 Chamberlain Street to 44 Chamberlain Street.. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	66_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	57+00	53+00
67	M	Unauthorized alteration (E-18): white concrete block shed, utility marker, and tree house on left bank levee landside slope at 52 and 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	67_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	57+00	NA
68	M	Unauthorized alteration (E-21): yellow garage and on left bank levee lanside toe at 44 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	68_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	56+00	NA
69	M	Unauthorized alteration (E-20): stone landscaping on left bank levee landside slope; pool within 15 feet of landside toe; tree fort on levee crown at 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	69_1.jpg 69_2.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	56+00	NA



SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Genesee River - Left Bank and Channel, Wellsville

70	M	Unauthorized alteration (E-22): carport and patio deck at left bank levee landside toe; clothesline and metal pole on landside slope at 38 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	70_1.jpg 70_2.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	55+00	NA
71	M	Unauthorized alteration (E-23): chicken wire fence on left bank levee landside toe at 20 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).	Remove or submit Section 408 Alteration Request to USACE.	71_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	55+00	NA
78	M	Unauthorized alteration (E-24): utility pole on left bank 850' downstream of Madison Street (Stevens Street) bridge (just upstream of gatewell #3).	Submit Section 408 Alteration Request to USACE.	78_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	52+00	NA
79	M	Unauthorized alteration (E-25): guy wire w/in 15' of landside toe on left bank 850' downstream of Madison Street (Stevens Street) bridge(just upstream of gatewell #3).	Submit Section 408 Alteration Request to USACE.	79_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	52+00	NA
89	M	Unauthorized alteration (E-26): Pearl Street bridge removed.	Submit Section 408 Alteration Request to USACE.	89_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	46+00	NA
91	M	Unauthorized alteration (E-27): pipe line bridge just downstream of Steven Street bridge has been removed.	Submit Section 408 Alteration Request to USACE.	91_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	46+00	NA
94	M	Unauthorized alteration (E-28): chain link fence on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.	Remove or submit Section 408 Alteration Request to USACE.	94_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	46+00	44+00
96	M	Unauthorized alteration (E-29): Madison Street (Stevens Street) bridge (replaced Pearl Street bridge). Constructed after project. NYSDEC says permitted.	Submit Section 408 Alteration Request to USACE or verify USACE permission.	96_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	44+00	NA
97	M	Unauthorized alteration (E-30): Fence on left bank channel crest from Madison Street (Stevens Street) bridge to school building.	Remove or submit Section 408 Alteration Request to USACE.	97_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	34+00	43+00
99	M	Unauthorized alteration (E-35): concrete siphon gatewell on right bank channel sideslope (across from school). NYSDEC says permitted.	Submit Section 408 Alteration Request to USACE or verify USACE permission.	99_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	36+00	NA
100	M	Unauthorized alteration (E-31): concrete walkway at Wellsville High School (manhole is part of project per As-Built F-189-A-10/5).	Submit Section 408 Alteration Request to USACE.	100_1.jpg 100_2.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	38+00	NA
101	M	Unauthorized alteration (E-32): fence (covered in unwanted vegetation) 300' downstream of State Street bridge .	Remove or submit Section 408 Alteration Request to USACE.	101_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	38+00	NA
102	M	Unauthorized alteration (E-33): Wellsville High School gaurdrail, parking lot, and 2 signs on left bank levee downstream of State Street bridge. Blocks O&M access, per NYSDEC.	Remove or submit Section 408 Alteration Request to USACE.	102_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	37+00	NA
104	M	Unauthorized alteration (E-34): 2 utility poles 6 guy wires just downstream of State Street bridge (NYSDEC says permitted).	Submit Section 408 Alteration Request to USACE.	104_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	35+00	NA
105	M	Unauthorized alteration (E-36): 18" HDPE outfall and duck bill valve on left bank side slope just downstream of State Street bridge owned by NYSDOT. (NYSDEC says permitted)	Submit Section 408 Alteration Request to USACE or verify USACE permission.	105_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	34+00	NA
110	M	Unauthorized alteration (E-37): 4 utility poles w/in 15' of landside toe on left bank 250' upstream of State Street bridge.	Submit Section 408 Alteration Request to USACE.	110_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	30+00	NA
112	M	Unauthorized alteration (E-37a): 6" cast iron pipe on left bank levee waterside slope 450' upstream of State Street bridge.	Remove or submit Section 408 Alteration Request to USACE.		Levee Embankments	Encroachments	12/31/19 (FY17)	29+00	NA
114	M	Unauthorized alteration (E-39): asphalt sidewalk and guy wire at left bank levee landside toe.	Submit Section 408 Alteration Request to USACE.	114_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)	24+00	28+00
115	M	Unauthorized alteration (E-38): Green metal stairs and concrete pad for access to Water Intake Unit in left bank riverside slope at Steel Sheet Pile Weir (Water Intake Unit is part of project as shown on As-Constructed drawing 189-WEL-2/4).	Remove or submit Section 408 Alteration Request to USACE.	115_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	27+00	NA
116	M	Unauthorized alteration (E-40): unidentified drainage structure (metal man hole) on channel side slope on left bank, just upstream of Steel Sheet Pile Weir.	Remove or submit Section 408 Alteration Request to USACE.	116_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	26+00	NA
117	M	Unauthorized alteration (E-43): Parking lot and wooden post barrier on right bank in Island Park 500' upstream of Steel Sheet Pile Weir. Posts and wire rope restrict access.	Submit Section 408 Alteration Request to USACE.	117_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	22+00	NA
118	M	Unauthorized alteration (E-41): Wooden observation platform and fence on right bank 200' upstream of Steel Sheet Pile Weir.	Submit Section 408 Alteration Request to USACE.	118_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	25+00	NA



SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Genesee River - Left Bank and Channel, Wellsville

122	M	Unauthorized alteration (E-42): utility pole on left bank landside slope 475' upstream of Steel Sheet Pile Weir (across from maintenance garage).	Submit Section 408 Alteration Request to USACE.	122_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	23+00	NA
131	M	Unauthorized alteration (E-44): riprap added on right bank toe at island park adjacent to parking area.	Remove or submit Section 408 Alteration Request to USACE.	131_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	21+00	17+00
136	M	Unauthorized alteration (E-45): Wellsville, Addison, & Galetton Railroad gravel trailway (from Island Park pedestrian bridge to barrier levee weir) and signs on left bank near stone blocks blocking access to channel crest.	Submit Section 408 Alteration Request to USACE.	136_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	0+00	13+00
137	U	Unauthorized alteration (E-46): Wellsville, Addison, & Galetton Railroad trailway stone blocks obstructing access 575' downstream of barrier levee weir.	Remove or submit Section 408 Alteration Request to USACE.	137_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	6+00	NA
145	M	Unauthorized alteration (E-47): barbed wire fence and metal gate on right bank at upstream limit weir.	Remove or submit Section 408 Alteration Request to USACE.	145_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)	0+00	NA
147	M	Unauthorized alteration (E-48): USACE levee on left bank at upstream end of project has been removed and replaced by a new levee (constructed by BP & Sinclair Refinery during landfill remediation). NYSDEC says permitted.	Submit Section 408 Alteration Request to USACE or verify USACE permission.	147_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)	0+00	NA
148	M	Unauthorized alteration: 24" culvert on left bank, 400' upstream of pedestrian bridge.	Submit Section 408 Alteration Request to USACE.	148_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	100+00	NA
149	M	Unauthorized alteration: 36" culvert on left bank, 400' upstream of pedestrian bridge.	Submit Section 408 Alteration Request to USACE.	149_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)	100+00	NA

Attachment “B” – Left Bank Levee and Channel: Flood Damage
Reduction System Inspection Report



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Flood Damage Reduction Segment / System Inspection Report

Name of Segment / System: Genesee River - Left Bank and Channel, Wellsville

Public Sponsor(s): New York State Department of Environmental Conservation - Region 9

Public Sponsor Representative: Theodore Myers

Sponsor Phone: (716) 851-7070

Sponsor Email: theodore.myers@dec.ny.gov

Corps of Engineers Inspector: R. Remmers, J. Doktor, J. Rogers Inspection Start Date: 9/23/2019

Inspection End Date: _____

Inspection Report Prepared By: James Rogers Date Report Prepared: _____

Internal Technical Review (for Periodic Inspections) By: _____ Date of ITR: _____

Final Approved By: _____ Date Approved: _____

Type of Inspection:	<input type="checkbox"/> Initial Eligibility Inspection <input checked="" type="checkbox"/> Continuing Eligibility Inspection (Routine) <input type="checkbox"/> Continuing Eligibility Inspection (Periodic)	Overall Segment / System Rating: <input type="checkbox"/> Acceptable <input type="checkbox"/> Minimally Acceptable <input checked="" type="checkbox"/> Unacceptable
Contents of Report:	<input checked="" type="checkbox"/> Instructions <input type="checkbox"/> Initial Eligibility Inspection <input checked="" type="checkbox"/> General Items for All Flood Control Works <input checked="" type="checkbox"/> Levee Embankment <input type="checkbox"/> Concrete Floodwalls <input type="checkbox"/> Sheet Pile and Concrete I-walls <input checked="" type="checkbox"/> Interior Drainage System <input type="checkbox"/> Pump Stations <input checked="" type="checkbox"/> FDR System Channels	<p>Note: In addition to the report contents indicated here, a plan view drawing of the system, with stationing, should be included with this report to reference locations of items rated less than acceptable. Photos of general system condition and any noted deficiencies should also be attached.</p> <p>Note: This inspection rating represents the Corps evaluation of operations and maintenance of the flood damage reduction system and may be used in conjunction with other information for a levee certification determination for National Flood Insurance Program (NFIP) purposes if applicable. An Acceptable Corps inspection rating, alone, does not equate to a certifiable levee for the NFIP. It is recommended for levee systems currently accredited by the Federal Emergency Management Agency (FEMA) for NFIP purposes receiving a Corps Minimally Acceptable or Unacceptable rating, be evaluated by the levee owner to determine the potential impacts to the certification for FEMA.</p>



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Flood Damage Reduction Segment / System Public Sponsor Pre-Inspection Form

The following information is to be provided by the levee district sponsor prior to an inspection. This information will be used to help evaluate the organizational capability of the levee district to manage the levee segment / system maintenance program.

1. Levee segment / system and district: (name of the segment / system and levee district) Genesee River - Left Bank and Channel, Wellsville for CELRB
2. Reporting period: (month/day/year to month/day/year)
3. Summary of maintenance required by last inspection report:
4. Summary of maintenance performed this reporting period:
5. Summary of maintenance planned next reporting period:
6. Summary of changes to segment / system since last inspection:
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers:



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**Flood Damage Reduction Segment / System
Inspection Report
Genesee River - Left Bank and Channel,**

**Pre-Inspection Form
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Public Sponsor Pre-Inspection Report

The following information is to be provided by the levee district sponsor prior to an inspection

8. Levee district organization: (elected or appointed levee district officials and key employees)

Name	Position	Mailing Address	Phone Number	Email Address

General Instructions for the Inspection of Flood Damage Reduction Segments / Systems

A. Purpose of USACE Inspections:

The primary purpose of these inspections is to prevent loss of life and catastrophic damages; preserve the value of Federal investments, and to encourage non-Federal sponsors to bear responsibility for their own protection. Inspections should assure that Flood Damage Reduction structures and facilities are continually maintained and operated as necessary to obtain the maximum benefits. Inspections are also conducted to determine eligibility for Rehabilitation Assistance under authority of PL 84-99 for Federal and non-Federal systems. (ER 1130-2-530, ER 500-1-1)

B. Types of Inspections:

The Corps conducts several types of inspections of Flood Damage Reduction systems, as outlined below:

Initial Eligibility Inspections	Continuing Eligibility Inspections	
	Routine Inspections	Periodic Inspections
IEIs are conducted to determine whether a non-Federally constructed Flood Damage Reduction system meets the minimum criteria and standards set forth by the Corps for initial inclusion into the Rehabilitation and Inspection Program.	RIs are intended to verify proper maintenance, owner preparedness, and component operation.	PIs are intended to verify proper maintenance and component operation and to evaluate operational adequacy, structural stability, and safety of the system. Periodic Inspections evaluate the system's original design criteria vs. current design criteria to determine potential performance impacts, evaluate the current conditions, and compare the design loads and design analysis used against current design standards. This is to be done to identify components and features for the sponsor that need to be monitored more closely over time or corrected as needed. (Periodic Inspections are used as the basis of risk assessments.)

C. Inspection Boundaries:

Inspections should be conducted so as to rate each Flood Damage Reduction "Segment" of the system. The overall system rating will be the lowest segment rating in the system.

Project	System	Segment
A flood damage reduction project is made up of one or more flood damage reduction systems which were under the same authorization.	A flood damage reduction system is made up of one or more flood damage reduction segments which collectively provide flood damage reduction to a defined area. Failure of one segment within a system constitutes failure of the entire system. Failure of one system does not affect another system.	A flood damage reduction segment is defined as a discrete portion of a flood damage reduction system that is operated and maintained by a single entity. A flood damage reduction segment can be made up of one or more features (levee, floodwall, pump stations, etc).

D. Land Use Definitions:

The following three definitions are intended for use in determining minimum required inspection intervals and initial requirements for inclusion into the Rehabilitation and Inspection Program. Inspections should be considered for all systems that would result in significant environmental or economic impact upon failure regardless of specific land use.

Agricultural	Rural	Urban
Protected population in the range of zero to 5 households per square mile protected.	Protected population in the range of 6 to 20 households per square mile protected.	Greater than 20 households per square mile; major industrial areas with significant infrastructure investment. Some protected urban areas have no permanent population but may be industrial areas with high value infrastructure with no overnight population.



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**Flood Damage Reduction Segment / System
Inspection Report
Genesee River - Left Bank and Channel, Wellsville**

**General Instructions
Page 1 of 3**

E. Use of the Inspection Report Template:

The report template is intended for use in all Army Corps of Engineers inspections of levee and floodwall systems and flood damage reduction channels. The section of the template labeled "Initial Eligibility" only needs to be completed during Initial Eligibility Inspections of Non-Federally constructed Flood Damage Reduction Systems. The section labeled "General Items" needs to be completed with every inspection, along with all other sections that correspond to features in the system. The section labeled "Public Sponsor Pre-Inspection Report" is intended for completion before the inspection, if possible.

F. Individual Item / Component Ratings:

Assessment of individual components rated during the inspection should be based on the criteria provided in the inspection report template, though inspectors may incorporate additional items into the report based on the characteristics of the system. The assessment of individual components should be based on the following definitions.

Acceptable Item	Minimally Acceptable Item	Unacceptable Item
The inspected item is in satisfactory condition, with no deficiencies, and will function as intended during the next flood event.	The inspected item has one or more minor deficiencies that need to be corrected. The minor deficiency or deficiencies will not seriously impair the functioning of the item as intended during the next flood event.	The inspected item has one or more serious deficiencies that need to be corrected. The serious deficiency or deficiencies will seriously impair the functioning of the item as intended during the next flood event.

G. Overall Segment / System Ratings:

Determination of the overall system rating is based on the definitions below. Note that an Unacceptable System Rating may be either based on an engineering determination that concluded that noted deficiencies would prevent the system from functioning as intended during the next flood event, or based on the sponsor's demonstrated lack of commitment or inability to correct serious deficiencies in a timely manner.

Acceptable System	Minimally Acceptable System	Unacceptable System
All items or components are rated as Acceptable.	One or more items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable items would not prevent the segment / system from performing as intended during the next flood event.	One or more items are rated as Unacceptable and would prevent the segment / system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

H. Eligibility for PL84-99 Rehabilitation Assistance:

Inspected systems that are not operated and maintained by the Federal government may be Active in the Corps' Rehabilitation and Inspection Program (RIP) and eligible for rehabilitation assistance from the Corps as defined below:

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
The system is active in the RIP and eligible for PL84-99 rehabilitation assistance.	The system is Active in the RIP during the time that it takes to make needed corrections. Active systems are eligible for rehabilitation assistance. However, if the sponsor does not present USACE with proof that serious deficiencies (which had previously resulted in a minimally acceptable system rating) were corrected within the established timeframe, then the system will become Inactive in the RIP.	The system is Inactive in the RIP, and the status will remain Inactive until the sponsor presents USACE with proof that all items rated Unacceptable have been corrected. Inactive systems are ineligible for rehabilitation assistance.

I. Reporting:

After the inspection, the Corps is responsible for assembling an inspection report (or a summary report if it was a Periodic Inspection) including the following information:

- a. All sections of the report template used during the inspection, including the cover and pre-inspection materials. (Supplemental data collected, and any sections of the template that weren't used during the inspection do not need to be included with the report.)
- b. Photos of the general system condition and noted deficiencies.
- c. A plan view drawing of the system, with stationing, to reference locations of items rated less than acceptable.
- d. The relative importance of the identified maintenance issues should be specified in the transmittal letter.
- e. If the Overall System Rating is Minimally Acceptable, the report needs to establish a timeframe for correction of serious deficiencies noted (not to exceed two years) and indicate that if these items are not corrected within the required timeframe, the system will be rated as Unacceptable and made Inactive in the Rehabilitation Inspection Program.

J. Notification:

Reports are to be disseminated as follows within 30 days of the inspection date.

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
Reports need to be provided to the local sponsor and the county emergency management agency.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, and to the FEMA region.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, FEMA region, and to the Congressional delegation within 30 days of the inspection.

General Items for All Flood Damage Reduction Segments / Systems

For use during all inspections of all Flood Damage Reduction Segments / Systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Operations and Maintenance Manuals	A	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	N21L_2019_r_0013: Station_1 102+00: The sponsor provided the O&M Manual.: NA (A) N21L_2019_r_0015: Station_1 102+00: Local sponsor provided the Public Sponsor Pre-Inspection Report.: NA (A)
		M	Sponsor manuals are lost or missing or out of date; however, sponsor will obtain manuals prior to next scheduled inspection.	
		U	Sponsor has not obtained lost or missing manuals identified during previous inspection.	
2. Emergency Supplies and Equipment (A or M only)	A	A	The sponsor maintains a stockpile of sandbags, shovels, and other flood fight supplies which will adequately supply all needs for the initial days of a flood fight. Sponsor determines required quantity of supplies after consulting with inspector.	
		M	The sponsor does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	
3. Flood Preparedness and Training (A or M only)	A	A	Sponsor has a written system-specific flood response plan and a solid understanding of how to operate, maintain, and staff the FDR system during a flood. Sponsor maintains a list of emergency contact information for appropriate personnel and other emergency response agencies.	N21L_2019_r_0014: Station_1 102+00: Sponsor has an acceptable Emergency Action Plan (EAP).: NA (A)
		M	The sponsor maintains a good working knowledge of flood response activities, but documentation of system-specific emergency procedures and emergency contact personnel is insufficient or out of date.	

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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Unwanted Vegetation Growth ¹	M	A	The levee has little or no unwanted vegetation (trees, bush, or undesirable weeds), except for vegetation that is properly contained and/or situated on overbuilt sections, such that the mandatory 3-foot root-free zone is preserved around the levee profile. The levee has been recently mowed. The vegetation-free zone extends 15 feet from both the landside and riverside toes of the levee to the centerline of the tree. If the levee access easement doesn't extend to the described limits, then the vegetation-free zone must be maintained to the easement limits. Reference EM 1110-2-301 or Corps policy for regional vegetation variance.	N21L_2019_r_0055: Station_1 67+00: Station_2 66+00: Vegetation in excess of 12" on left bank levee waterside slope from Chamberland Street drainage channel to Madison Street bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0060: Station_1 61+00: Station_2 58+00: 9 trees and 1 tree stump within 15' of levee landside toe 1,600' downstream of Madison Street (Stevens Street) bridge (60, 68, & 70 Seneca Street).: Remove trees and tree stump. (M) N21L_2019_r_0072: Station_1 54+00: Station_2 46+00: Trees on left bank landside slope and within 15' of landside toe from 1,200' downstream of Madison Street (Stevens Street) bridge to Ponding Area fence.: Remove trees. (M) N21L_2019_r_0077: Station_1 53+00: Unwanted vegetation within 15' of levee landside toe.: Remove unwanted vegetation. (M) N21L_2019_r_0133: Station_1 13+00: Vegetation in excess of 12" on left bank of levee, 400' upstream of pedestrian bridge.: Mow vegetation to 3"-6" height. (M)
		M	Minimal vegetation growth (brush, weeds, or trees 2 inches in diameter or smaller) is present within the zones described above. This vegetation must be removed but does not currently threaten the operation or integrity of the levee.	
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above and must be removed to reestablish or ascertain levee integrity.	
2. Sod Cover	A	A	There is good coverage of sod over the levee.	
		M	Approximately 25% of the sod cover is missing or damaged over a significant portion or over significant portions of the levee embankment. This may be the result of over-grazing or feeding on the levee, unauthorized vehicular traffic, chemical or insect problems, or burning during inappropriate seasons.	
		U	Over 50% of the sod cover is missing or damaged over a significant portion or portions of the levee embankment.	
		N/A	Surface protection is provided by other means.	
3. Encroachments	M	A	No trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the levee.	N21L_2019_r_0009: Station_1 16+00: Island Park pedestrian bridge is not an encroachment (former railroad bridge as shown on As-Constructed drawing F-189-A-10/6).: NA (A) N21L_2019_r_0061: Station_1 60+00: Unauthorized alteration (E-15): landscaping timbers and debris on landside slope at 70 Chamberlain Street on left bank 1,700' downstream of Madison Street (Stevens Street) bridge.: Remove or submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0062: Station_1 59+00: Unauthorized alteration (E-17): red metal shed and debris at 60 Chamberlain Street on left bank 1,600' downstream of Madison Street (Stevens Street) bridge (60 Chamberlain
		M	Trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the levee.	

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Rated Item	Rating	Rating Guidelines	Location/Remarks/Recommendations
			<p>Street).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0066: Station_1 57+00: Station_2 53+00: Unauthorized alteration (E-19): utility line potentially buried in levee section from 70 Chamberlain Street to 44 Chamberlain Street.. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0067: Station_1 57+00: Unauthorized alteration (E-18): white concrete block shed, utility marker, and tree house on left bank levee landside slope at 52 and 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0068: Station_1 56+00: Unauthorized alteration (E-21): yellow garage and on left bank levee landside toe at 44 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0069: Station_1 56+00: Unauthorized alteration (E-20): stone landscaping on left bank levee landside slope; pool within 15 feet of landside toe; tree fort on levee crown at 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0070: Station_1 55+00: Unauthorized alteration (E-22): carport and patio deck at left bank levee landside toe; clothesline and metal pole on landside slope at 38 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0071: Station_1 55+00: Unauthorized alteration (E-23): chicken wire fence on left bank levee landside toe at 20 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0078: Station_1 52+00: Unauthorized alteration (E-24): utility pole on left bank 850' downstream of Madison Street (Stevens Street) bridge (just upstream of gatewell #3).: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0079: Station_1 52+00: Unauthorized alteration (E-25): guy wire w/in 15' of landside toe on left</p>

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Rated Item	Rating	Rating Guidelines	Location/Remarks/Recommendations
			<p>bank 850' downstream of Madison Street (Stevens Street) bridge(just upstream of gatewell #3):. Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0080: Station_1 47+00: Station_2 50+00: Ponding Area fence is part of the project.: NA (A)</p> <p>N21L_2019_r_0096: Station_1 44+00: Unauthorized alteration (E-29): Madison Street (Stevens Street) bridge (replaced Pearl Street bridge). Constructed after project. NYSDEC says permitted.: Submit Section 408 Alteration Request to USACE or verify USACE permission. (M)</p> <p>N21L_2019_r_0097: Station_1 34+00: Station_2 43+00: Unauthorized alteration (E-30): Fence on left bank channel crest from Madison Street (Stevens Street) bridge to school building.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0100: Station_1 38+00: Unauthorized alteration (E-31): concrete walkway at Wellsville High School (manhole is part of project per As-Built F-189-A-10/5):. Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0109: Station_1 27+00: 1974 Steel Sheet Pile Weir by Others - shown on AS-CONSTRUCTED drawing 189-WEL-2/4 (approved by USACE):. NA (A)</p> <p>N21L_2019_r_0110: Station_1 30+00: Unauthorized alteration (E-37): 4 utility poles within 15' of landside toe on left bank 250' upstream of State Street bridge.: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0112: Station_1 29+00: Unauthorized alteration (E-37a): 6" cast iron pipe on left bank levee waterside slope 450' upstream of State Street bridge.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0114: Station_1 24+00: Station_2 28+00: Unauthorized alteration (E-39): asphalt sidewalk and guy wire at left bank levee landside toe.: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0115: Station_1 27+00: Unauthorized alteration (E-38): Green metal stairs and concrete pad for access to Water Intake Unit in left bank riverside slope at Steel Sheet Pile Weir (Water Intake Unit is part of project as shown on As-Constructed drawing 189-WEL-2/4):. Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0122: Station_1 23+00: Unauthorized</p>

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				alteration (E-42): utility pole on left bank landside slope 475' upstream of Steel Sheet Pile Weir (across from maintenance garage).: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0126: Station_1 23+00: Authorized alteration: new gatewell installation for 48" CMP on left bank, 515' upstream of Steel Sheet Pile Weir.: NA (A) N21L_2019_r_0142: Station_1 0+00: Station_2 0+00: Approved alteration: drainage swale berm at left bank lagoon between barrier levee weir and upstream limit weir.: NA (A) N21L_2019_r_0147: Station_1 0+00: Unauthorized alteration (E-48): USACE levee on left bank at upstream end of project has been removed and replaced by a new levee (constructed by BP & Sinclair Refinery during landfill remediation). NYSDEC says permitted.: Submit Section 408 Alteration Request to USACE or verify USACE permission. (M)
4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures) (A or U only)	NA	A	Closure structure in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components are clearly marked and installation instructions/ procedures readily available. Trial erections have been accomplished in accordance with the O&M Manual.	
		U	Any of the following issues is cause for this rating: Closure structure in poor condition. Parts missing or corroded. Placing equipment may not be available within the anticipated warning time. The storage vaults cannot be opened during the time of inspection. Components of closure are not clearly marked and installation instructions/ procedures are not readily available. Trial erections have not been accomplished in accordance with the O&M Manual.	
		N/A	There are no closure structures along this component of the FDR segment / system.	
5. Slope Stability	A	A	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	
		M	Minor slope stability problems that do not pose an immediate threat to the levee embankment.	
		U	Major slope stability problems (ex. deep seated sliding) identified that must be repaired to reestablish the integrity of the levee embankment.	
6. Erosion/ Bank Caving	A	A	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	
		M	There are areas where minor erosion is occurring or has occurred on or near the levee embankment, but levee integrity is not threatened.	
		U	Erosion or caving is occurring or has occurred that threatens the stability and integrity of the levee. The erosion or caving has progressed into the levee section or into the extended	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
			footprint of the levee foundation and has compromised the levee foundation stability.	
7. Settlement ²	M	A	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	N21L_2019_r_0150: Station_1 61+00: Depression within levee crown over unauthorized 24" CMP outfall.: Fill and repair depression in levee crown; determine cause of depression and rectify problem. (M)
		M	Minor irregularities that do not threaten integrity of levee. Records are incomplete or inclusive.	
		U	Obvious variations in elevation over significant reaches. No records exist or records indicate that design elevation is compromised.	
8. Depressions/ Rutting	A	A	There are scattered, shallow ruts, pot holes, or other depressions on the levee that are unrelated to levee settlement. The levee crown, embankments, and access road crowns are well established and drain properly without any ponded water.	N21L_2019_r_0052: Station_1 69+00: Observation: Chamberland Street drainage ditch creates apparent gap in line of protection on left bank levee (project built this way).: Recommendation: evaluate the possibility of altering the project to improve a continuous line of protection; potentially include a pipe and flapgate. (A)
		M	There are some infrequent minor depressions less than 6 inches deep in the levee crown, embankment, or access roads that will pond water.	
		U	There are depressions greater than 6 inches deep that will pond water.	
9. Cracking	A	A	Minor longitudinal, transverse, or desiccation cracks with no vertical movement along the crack. No cracks extend continuously through the levee crest.	
		M	Longitudinal and/or transverse cracks up to 6 inches in depth with no vertical movement along the crack. No cracks extend continuously through the levee crest. Longitudinal cracks are no longer than the height of the levee.	
		U	Cracks exceed 6 inches in depth. Longitudinal cracks are longer than the height of the levee and/or exhibit vertical movement along the crack. Transverse cracks extend through the entire levee width.	
10. Animal Control	M	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	N21L_2019_r_0065: Station_1 58+00: Animal burrow in left bank levee crest at 52 Chamberlain Street.: Improve animal control and fill animal burrow. (M) N21L_2019_r_0111: Station_1 28+00: Multiple animal burrows (approx. half dozen) on left bank waterside slope 450' upstream of State Street bridge.: Fill animal burrows and improve animal control program. (M)
		M	The existing animal burrow control program needs to be improved. Several burrows are present which may lead to seepage or slope stability problems, and they require immediate attention.	
		U	Animal burrow control program is not effective or is nonexistent. Significant maintenance is required to fill existing burrows, and the levee will not provide reliable flood protection until this maintenance is complete.	
11. Culverts/ Discharge Pipes ³ (This item includes both concrete and corrugated metal pipes.)	U	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	N21L_2019_r_0074: Station_1 53+00: 24" RCP on left bank, 1,000' downstream of Madison Street (Stevens Street) bridge. Unacceptable pipe based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U) N21L_2019_r_0083: Station_1 50+00: Two 36" CMP, at Gatewell #4, 550' downstream of Madison Street (Stevens

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	Street) bridge. Both are Unacceptable based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U) N21L_2019_r_0121: Station_1 23+00: 36" CMP on left bank, 475' upstream of Steel Sheet Pile Weir. Unacceptable pipe based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U) N21L_2019_r_0129: Station_1 23+00: 48" CMP on left bank, 515' upstream of Steel Sheet Pile Weir. Unacceptable pipe based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U) N21L_2019_r_0132: Station_1 13+00: 24" CMP on left bank 325' upstream of Island Park Pedestrian Walkway Bridge. Unacceptable pipe based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U)
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
12. Riprap Revetments & Bank Protection	A	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
13. Revetments other than Riprap	NA	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	
		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
14. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining FDR segment / system stability during high water functioned properly during the last flood event and no sediment is observed in horizontal system (if applicable). Nothing is observed which would indicate that the drainage systems won't function properly during the next flood, and maintenance records indicate regular cleaning. Wells have been pumped tested within the past 5 years and documentation is provided.	
		M	Toe drainage systems or pressure relief wells are damaged and may become clogged if they are not repaired. Maintenance records are incomplete or indicate irregular cleaning and pump testing.	
		U	Toe drainage systems or pressure relief wells necessary for maintaining FDR segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		N/A	There are no relief wells/ toe drainage systems along this component of the FDR segment / system.	
15. Seepage	A	A	No evidence or history of unrepaired seepage, saturated areas, or boils.	
		M	Evidence or history of minor unrepaired seepage or small saturated areas at or beyond the landside toe but not on the landward slope of levee. No evidence of soil transport.	
		U	Evidence or history of active seepage, extensive saturated areas, or boils.	

¹ If there is significant growth on the levee that inhibits the inspection of animal burrows or other items, the inspection should be ended until this item is corrected.

² Detailed survey elevations are normally required during Periodic Inspections, and whenever there are obvious visual settlements.

³ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

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	<p>Inspect ID: N21L_2019_r_0055 Title: USACE_CELRB_N21L_2019_r_0055_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank levee waterside slope from Chamberland Street drainage channel to Madison Street bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 67+00; Station_2: 66+00</p>
	<p>Inspect ID: N21L_2019_r_0055 Title: USACE_CELRB_N21L_2019_r_0055_2.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank levee waterside slope from Chamberland Street drainage channel to Madison Street bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 67+00; Station_2: 66+00</p>



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	<p>Inspect ID: N21L_2019_r_0060 Title: USACE_CELRB_N21L_2019_r_0060_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: 9 trees and 1 tree stump within 15' of levee landside toe 1,600' downstream of Madison Street (Stevens Street) bridge (60, 68, & 70 Seneca Street).; Action: Remove trees and tree stump.; Station_1: 61+00; Station_2: 58+00</p>
	<p>Inspect ID: N21L_2019_r_0072 Title: USACE_CELRB_N21L_2019_r_0072_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Trees on left bank landside slope and within 15' of landside toe from 1,200' downstream of Madison Street (Stevens Street) bridge to Ponding Area fence.; Action: Remove trees.; Station_1: 54+00; Station_2: 46+00</p>



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	<p>Inspect ID: N21L_2019_r_0077 Title: USACE_CELRB_N21L_2019_r_0077_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Unwanted vegetation within 15' of levee landside toe.; Action: Remove unwanted vegetation.; Station_1: 53+00</p>
	<p>Inspect ID: N21L_2019_r_0133 Title: USACE_CELRB_N21L_2019_r_0133_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank of levee, 400' upstream of pedestrian bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 13+00</p>



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Inspect ID: N21L_2019_r_0133 **Title:** USACE_CELRB_N21L_2019_r_0133_2.jpg
Rated Item: 1. Unwanted Vegetation Growth **Caption:** Rating: Minimally Acceptable;
 Remarks: Vegetation in excess of 12" on left bank of levee, 400' upstream of pedestrian bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 13+00



Inspect ID: N21L_2019_r_0061 **Title:** USACE_CELRB_N21L_2019_r_0061_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks:
 Unauthorized alteration (E-15): landscaping timbers and debris on landside slope at 70 Chamberlain Street on left bank 1,700' downstream of Madison Street (Stevens Street) bridge.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 60+00



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	<p>Inspect ID: N21L_2019_r_0061 Title: USACE_CELRB_N21L_2019_r_0061_2.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-15): landscaping timbers and debris on landside slope at 70 Chamberlain Street on left bank 1,700' downstream of Madison Street (Stevens Street) bridge.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 60+00</p>
	<p>Inspect ID: N21L_2019_r_0062 Title: USACE_CELRB_N21L_2019_r_0062_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-17): red metal shed and debris at 60 Chamberlain Street on left bank 1,600' downstream of Madison Street (Stevens Street) bridge (60 Chamberlain Street).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 59+00</p>



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	<p>Inspect ID: N21L_2019_r_0066 Title: USACE_CELRB_N21L_2019_r_0066_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-19): utility line potentially buried in levee section from 70 Chamberlain Street to 44 Chamberlain Street.. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 57+00; Station_2: 53+00</p>
	<p>Inspect ID: N21L_2019_r_0067 Title: USACE_CELRB_N21L_2019_r_0067_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-18): white concrete block shed, utility marker, and tree house on left bank levee landside slope at 52 and 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 57+00</p>



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	<p>Inspect ID: N21L_2019_r_0068 Title: USACE_CELRB_N21L_2019_r_0068_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-21): yellow garage and on left bank levee landside toe at 44 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 56+00</p>
	<p>Inspect ID: N21L_2019_r_0069 Title: USACE_CELRB_N21L_2019_r_0069_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-20): stone landscaping on left bank levee landside slope; pool within 15 feet of landside toe; tree fort on levee crown at 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 56+00</p>



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Inspect ID: N21L_2019_r_0069 **Title:** USACE_CELRB_N21L_2019_r_0069_2.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-20): stone landscaping on left bank levee landside slope; pool within 15 feet of landside toe; tree fort on levee crown at 48 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 56+00



Inspect ID: N21L_2019_r_0070 **Title:** USACE_CELRB_N21L_2019_r_0070_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-22): carport and patio deck at left bank levee landside toe; clothesline and metal pole on landside slope at 38 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 55+00



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Inspect ID: N21L_2019_r_0070 **Title:** USACE_CELRB_N21L_2019_r_0070_2.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-22): carport and patio deck at left bank levee landside toe; clothesline and metal pole on landside slope at 38 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 55+00



Inspect ID: N21L_2019_r_0071 **Title:** USACE_CELRB_N21L_2019_r_0071_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-23): chicken wire fence on left bank levee landside toe at 20 Chamberlain Street. Note: levee is overbuilt at this location (approx. 42 feet wide).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 55+00



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	<p>Inspect ID: N21L_2019_r_0078 Title: USACE_CELRB_N21L_2019_r_0078_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-24): utility pole on left bank 850' downstream of Madison Street (Stevens Street) bridge (just upstream of gatewell #3).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 52+00</p>
	<p>Inspect ID: N21L_2019_r_0079 Title: USACE_CELRB_N21L_2019_r_0079_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-25): guy wire w/in 15' of landside toe on left bank 850' downstream of Madison Street (Stevens Street) bridge(just upstream of gatewell #3).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 52+00</p>



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	<p>Inspect ID: N21L_2019_r_0096 Title: USACE_CELRB_N21L_2019_r_0096_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-29): Madison Street (Stevens Street) bridge (replaced Pearl Street bridge). Constructed after project. NYSDEC says permitted.; Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 44+00</p>
	<p>Inspect ID: N21L_2019_r_0097 Title: USACE_CELRB_N21L_2019_r_0097_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-30): Fence on left bank channel crest from Madison Street (Stevens Street) bridge to school building.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 34+00; Station_2: 43+00</p>



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	<p>Inspect ID: N21L_2019_r_0100 Title: USACE_CELRB_N21L_2019_r_0100_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-31): concrete walkway at Wellsville High School (manhole is part of project per As-Built F-189-A-10/5).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 38+00</p>
	<p>Inspect ID: N21L_2019_r_0100 Title: USACE_CELRB_N21L_2019_r_0100_2.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-31): concrete walkway at Wellsville High School (manhole is part of project per As-Built F-189-A-10/5).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 38+00</p>



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Inspect ID: N21L_2019_r_0110 **Title:** USACE_CELRB_N21L_2019_r_0110_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-37): 4 utility poles within 15' of landside toe on left bank 250' upstream of State Street bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 30+00



Inspect ID: N21L_2019_r_0114 **Title:** USACE_CELRB_N21L_2019_r_0114_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-39): asphalt sidewalk and guy wire at left bank levee landside toe.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 24+00; Station_2: 28+00



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	<p>Inspect ID: N21L_2019_r_0115 Title: USACE_CELRB_N21L_2019_r_0115_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-38): Green metal stairs and concrete pad for access to Water Intake Unit in left bank riverside slope at Steel Sheet Pile Weir (Water Intake Unit is part of project as shown on As-Constructed drawing 189-WEL-2/4).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 27+00</p>
	<p>Inspect ID: N21L_2019_r_0122 Title: USACE_CELRB_N21L_2019_r_0122_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-42): utility pole on left bank landside slope 475' upstream of Steel Sheet Pile Weir (across from maintenance garage).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 23+00</p>



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	<p>Inspect ID: N21L_2019_r_0142 Title: USACE_CELRB_N21L_2019_r_0142_1.jpg Rated Item: 3. Encroachments Caption: Rating: Acceptable; Remarks: Approved alteration: drainage swale berm at left bank lagoon between barrier levee weir and upstream limit weir.; Action: NA; Station_1: 0+00; Station_2: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0142 Title: USACE_CELRB_N21L_2019_r_0142_3.jpg Rated Item: 3. Encroachments Caption: Rating: Acceptable; Remarks: Approved alteration: drainage swale berm at left bank lagoon between barrier levee weir and upstream limit weir.; Action: NA; Station_1: 0+00; Station_2: 0+00</p>



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	<p>Inspect ID: N21L_2019_r_0147 Title: USACE_CELRB_N21L_2019_r_0147_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-48): USACE levee on left bank at upstream end of project has been removed and replaced by a new levee (constructed by BP & Sinclair Refinery during landfill remediation). NYSDEC says permitted.; Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0150 Title: USACE_CELRB_N21L_2019_r_0150_1.jpg Rated Item: 7. Settlement Caption: Rating: Minimally Acceptable; Remarks: Depression within levee crown over unauthorized 24" CMP outfall.; Action: Fill and repair depression in levee crown; determine cause of depression and rectify problem.; Station_1: 61+00</p>



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	<p>Inspect ID: N21L_2019_r_0052 Title: USACE_CELRB_N21L_2019_r_0052_1.jpg Rated Item: 8. Depressions/ Rutting Caption: Rating: Acceptable; Remarks: Observation: Chamberland Street drainage ditch creates apparent gap in line of protection on left bank levee (project built this way).; Action: Recommendation: evaluate the possibility of altering the project to improve a continuous line of protection; potentially include a pipe and flapgate.; Station_1: 69+00</p>
	<p>Inspect ID: N21L_2019_r_0065 Title: USACE_CELRB_N21L_2019_r_0065_1.jpg Rated Item: 10. Animal Control Caption: Rating: Minimally Acceptable; Remarks: Animal burrow in left bank levee crest at 52 Chamberlain Street.; Action: Improve animal control and fill animal burrow.; Station_1: 58+00</p>



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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	M	A	No obstructions, vegetation, debris, or sediment accumulation noted within interior drainage channels or blocking the culverts, inlets, or discharge areas. Concrete joints and weep holes are free of grass and weeds.	N21L_2019_r_0043: Station_1 75+00: 24" CMP outfall on left bank 1,600' upstream of Bolivar Road bridge is approx. 20% obstructed by vegetation and sediment.: Remove vegetation and sediment obstructions. (M) N21L_2019_r_0125: Station_1 23+00: 48" CMP inlet, 515' upstream of Steel Sheet Pile Weir, is clear of obstructions and in adequate condition.: NA (A) N21L_2019_r_0138: Station_1 5+00: 42" CMP outfall on left bank just upstream of Wellsville, Addison, & Galetton Railroad railway stone blocks, is clear of obstructions and in adequate condition.: NA (A)
		M	Obstructions, vegetation, debris, or sediment are minor and have not impaired channel flow capacity or blocked more than 10% of any culvert openings, but should be removed. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	
		U	Obstructions, vegetation, debris, or sediment have impaired the channel flow capacity or blocked more than 10% of a culvert opening. Sediment and debris removal required to re-establish flow capacity.	
2. Encroachments	U	A	No trash, debris, unauthorized structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the interior drainage system.	N21L_2019_r_0059: Station_1 61+00: Unauthorized alteration (E-15a): 24" CMP outfall with flap gate encroachment through levee. Flap gate stuck in open position. Pipe has not been videotaped.: Remove or submit Section 408 Alteration Request to USACE. Videotape pipe. Close flap gate and check seal. (U) N21L_2019_r_0088: Station_1 48+00: Maintenance: 12" HDPE replacement pipe on right bank 475' downstream of Madison Street (Stevens Street) bridge.: NA (A) N21L_2019_r_0130: Station_1 23+00: Pipe repair: HDPE slipline inserted into 48" CMP under West Dyke Street access road on left bank.: NA (A)
		M	Trash, debris, unauthorized structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of this component of the interior drainage system.	
3. Ponding Areas	A	A	No trash, debris, structures, or other obstructions present within the ponding areas. Sediment deposits do not exceed 10% of capacity.	N21L_2019_r_0087: Station_1 48+00: Ponding area.: NA (A)
		M	Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit operations and maintenance. Sediment deposits do not exceed 30% of capacity.	
		U	Trash, debris, excavations, structures, or other obstructions, or other encroachments or activities noted that will inhibit operations, maintenance, or emergency work. Sediment deposits exceeds 30% of capacity.	
		N/A	There are no ponding areas associated with the interior drainage system.	
4. Fencing and Gates ¹	M	A	Fencing is in good condition and provides protection against falling or unauthorized access. Gates open and close freely, locks are in place, and there is little corrosion on metal parts.	N21L_2019_r_0034: Station_1 88+00: Joint connections improperly repaired and lower support pole for handrailing is no longer anchored to headwall on left bank, 300' upstream of Bolivar Road bridge.: Properly repair headwall railing. (M) N21L_2019_r_0040: Station_1 82+00: Lower support pole for handrailing is bent and no longer anchored to headwall
		M	Fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	
		U	Fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous features are not secured.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		N/A	There are no features noted that require safety fencing.	on left bank, 900' upstream of Bolivar Road bridge.: Properly repair headwall railing. (M) N21L_2019_r_0081: Station_1 50+00: Station_2 47+00: Trees and vegetation on ponding area fence.: Remove trees and vegetation. (M)
5. Concrete Surfaces (Such as gate wells, outfalls, intakes, or culverts)	A	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	
		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
6. Tilting, Sliding or Settlement of Concrete and Sheet Pile Structures ² (Such as gate wells, outfalls, intakes, or culverts)	A	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
7. Foundation of Concrete Structures ³ (Such as culverts, inlet and discharge structures, or gatewells.)	A	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	N21L_2019_r_0076: Station_1 53+00: Headwall on left bank, 1,000' downstream of Madison Street (Stevens Street) bridge, in adequate condition.: NA (A) N21L_2019_r_0085: Station_1 50+00: Headwall on left bank at Gatewell #4, 550' downstream of Madison Street (Stevens Street) bridge, in adequate condition.: NA (A) N21L_2019_r_0119: Station_1 23+00: New headwall on left bank, 475' upstream of Steel Sheet Pile Weir, in adequate
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. The rate of erosion is such that the structure is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that may lead to structural instabilities before the next inspection.	

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		N/A	There are no concrete items in the interior drainage system.	condition.: Currently being repaired. (A) N21L_2019_r_0124: Station_1 23+00: Headwall on left bank, 515' upstream of Steel Sheet Pile Weir, in adequate condition.: NA (A) N21L_2019_r_0127: Station_1 23+00: Headwall for inlet, 515' upstream of Steel Sheet Pile Weir, in adequate condition.: NA (A) N21L_2019_r_0134: Station_1 13+00: Headwall on left bank, 325' upstream of Island Park Pedestrian Walkway Bridge, in adequate condition.: NA (A)
8. Monolith Joints	NA	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no monolith joints in the interior drainage system.	
9. Culverts/ Discharge Pipes ⁴	U	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	N21L_2019_r_0053: Station_1 69+00: 36" cast iron pipe is shown on plans. Inspection was unable to locate in field.: Verify existence. (NA) Refer to Rated Item 11. Culverts/ Discharge Pipes of the Levee Embankments section of this attachment.
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
10. Sluice / Slide Gates ⁵	A	A	Gates open and close freely to a tight seal or minor leakage. Gate operators are in good working condition and are properly maintained. Sill is free of sediment and other obstructions. Gates and lifters have been maintained and are free of corrosion. Documentation provided during the inspection.	N21L_2019_r_0073: Station_1 53+00: Gatewell #3 on left bank 1,000' downstream of Madison Street (Stevens Street) bridge appears to be in adequate condition. Not operated at time of FY19 Inspection.: NA (A) N21L_2019_r_0082: Station_1 49+00: Gatewell #4 on left bank 550' downstream of Madison Street (Stevens Street) bridge appears to be in adequate condition. Not operated at time of FY19 Inspection.: NA (A)
		M	Gates and/or operators have been damaged or have minor corrosion, and open and close with resistance or binding. Leakage quantity is controllable, but maintenance is required. Sill is free of sediment and other obstructions.	
		U	Gates do not open or close and/or operators do not function. Gate, stem, lifter and/or guides may be damaged or have major corrosion.	
		N/A	There are no sluice/ slide gates.	
11. Flap Gates/ Flap Valves/ Pinch Valves ¹	A	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	N21L_2019_r_0075: Station_1 53+00: 24" flapgate on left bank, 1,000' downstream of Madison Street (Stevens Street) bridge, is clear of obstructions and in adequate condition.: NA (A) N21L_2019_r_0084: Station_1 50+00: Two 36" flap gates at Gatewell #4, 550' downstream of Madison Street (Stevens Street) bridge, is clear of obstructions and in adequate condition.: NA (A) N21L_2019_r_0120: Station_1 23+00: 36" flapgate on left bank, 475' upstream of Steel Sheet Pile Weir, is clear of obstructions and in adequate condition.: NA (A) N21L_2019_r_0123: Station_1 23+00: 48" flap gate on left bank, 515' upstream of Steel Sheet Pile Weir, is clear of obstructions and in adequate condition.: NA (A) N21L_2019_r_0135: Station_1 13+00: 42" flap gate on left bank, 325' upstream of Island Park Pedestrian Walkway Bridge, is clear of obstructions and in adequate condition.: NA (A)
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	
12. Trash Racks (non-mechanical)	NA	A	Trash racks are fastened in place and properly maintained.	N21L_2019_r_0128: Station_1 23+00: Observation: 48" CMP on levee landside slope, 515' upstream of Steel Sheet Pile Weir, does not have a trash rack to prevent unauthorized access into pipe.: Recommendation: installing trash rack over opening to keep out debris and unauthorized access.
		M	Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station, bars are corroded to the point that up to 10% of the sectional area may be lost. Repair or replacement is required.	

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		U	Trash racks are missing or damaged to the extent that they are no longer functional and must be replaced. (For example, more than 10% of the sectional area may be lost.)	(NA)
		N/A	There are no trash racks, or they are covered in the pump stations section of the report.	
13. Other Metallic Items	NA	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	
		M	Corrosion seen on metallic parts appears to be maintainable.	
		U	Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	
		N/A	There are no other significant metallic items.	
14. Riprap Revetments of Inlet/ Discharge Areas	A	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
15. Revetments other than Riprap	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

¹ Proper operation of this item must be demonstrated during the inspection.

² The sponsor should be monitoring any observed movement to verify whether the movement is active or inactive.

³ Inspectors must have as-built drawings available during the inspection so that the lateral distance to the heel and toe of the floodwalls can be determined in the field.

⁴ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent

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condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

⁵ Proper operation of the gates (full open and closed) must be demonstrated during the inspection if no documentation is available. Be aware of both manual and electrical operators.

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	<p>Inspect ID: N21L_2019_r_0043 Title: USACE_CELRB_N21L_2019_r_0043_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: 24" CMP outfall on left bank 1,600' upstream of Bolivar Road bridge is approx. 20% obstructed by vegetation and sediment.; Action: Remove vegetation and sediment obstructions.; Station_1: 75+00</p>
	<p>Inspect ID: N21L_2019_r_0059 Title: USACE_CELRB_N21L_2019_r_0059_1.jpg Rated Item: 2. Encroachments Caption: Rating: Unacceptable; Remarks: Unauthorized alteration (E-15a): 24" CMP outfall with flap gate encroachment through levee. Flap gate stuck in open position. Pipe has not been videotaped. ; Action: Remove or submit Section 408 Alteration Request to USACE. Videotape pipe. Close flap gate and check seal.; Station_1: 61+00</p>



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Inspect ID: N21L_2019_r_0059 **Title:** USACE_CELRB_N21L_2019_r_0059_2.jpg
Rated Item: 2. Encroachments **Caption:** Rating: Unacceptable; Remarks: Unauthorized alteration (E-15a): 24" CMP outfall with flap gate encroachment through levee. Flap gate stuck in open position. Pipe has not been videotaped. ; Action: Remove or submit Section 408 Alteration Request to USACE. Videotape pipe. Close flap gate and check seal.; Station_1: 61+00



Inspect ID: N21L_2019_r_0034 **Title:** USACE_CELRB_N21L_2019_r_0034_1.jpg
Rated Item: 4. Fencing and Gates **Caption:** Rating: Minimally Acceptable; Remarks: Joint connections improperly repaired and lower support pole for handrailing is no longer anchored to headwall on left bank, 300' upstream of Bolivar Road bridge.; Action: Properly repair headwall railing.; Station_1: 88+00



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	<p>Inspect ID: N21L_2019_r_0034 Title: USACE_CELRB_N21L_2019_r_0034_2.jpg Rated Item: 4. Fencing and Gates Caption: Rating: Minimally Acceptable; Remarks: Joint connections improperly repaired and lower support pole for handrailing is no longer anchored to headwall on left bank, 300' upstream of Bolivar Road bridge.; Action: Properly repair headwall railing.; Station_1: 88+00</p>
	<p>Inspect ID: N21L_2019_r_0040 Title: USACE_CELRB_N21L_2019_r_0040_1.jpg Rated Item: 4. Fencing and Gates Caption: Rating: Minimally Acceptable; Remarks: Lower support pole for handrailing is bent and no longer anchored to headwall on left bank, 900' upstream of Bolivar Road bridge.; Action: Properly repair headwall railing.; Station_1: 82+00</p>



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Inspect ID: N21L_2019_r_0081 **Title:** USACE_CELRB_N21L_2019_r_0081_1.jpg
Rated Item: 4. Fencing and Gates **Caption:** Rating: Minimally Acceptable; Remarks: Trees and vegetation on ponding area fence.; Action: Remove trees and vegetation.; Station_1: 50+00; Station_2: 47+00



Inspect ID: N21L_2019_r_0128 **Title:** USACE_CELRB_N21L_2019_r_0128_1.jpg
Rated Item: 12. Trash Racks (non-mechanical) **Caption:** Rating: Acceptable; Remarks: Observation: 48" CMP on levee landside slope, 515' upstream of Steel Sheet Pile Weir, does not have a trash rack to prevent unauthorized access into pipe.; Action: Recommendation: installing trash rack over opening to keep out debris and unauthorized access. ; Station_1: 23+00



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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	U	A	No obstructions, vegetation, debris, or sediment accumulation within the channel. Concrete channel joints and weep holes are free of grass and weeds.	N21L_2019_r_0001: Station_1 0+00: Tree debris on right bank at upstream limit weir.: Remove tree debris. (M)
		M	Obstructions (including log jams), vegetation, debris, or sediment are minor and have not impaired channel flow capacity, but should be removed. Sediment shoals have not developed to the extent that they can support vegetation other than non-aquatic grasses. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	N21L_2019_r_0003: Station_1 0+00: Station_2 0+00: Trees and vegetation on right bank sideslope from 400' downstream of upstream limit weir to upstream limit weir.: Remove vegetation. (U)
		U	Obstructions (including log jams), vegetation, debris or sediment have impaired the channel flow capacity. Sediment shoals are well established and support woody and/or brushy vegetation. Sediment and debris removal required to re-establish flow capacity.	N21L_2019_r_0005: Station_1 0+00: Trees and vegetation on left bank 175' upstream of barrier levee weir.: Remove trees and mow vegetation to 3"-6" height. (U) N21L_2019_r_0008: Station_1 0+00: Weir structure at barrier levee ("barrier levee weir") at upstream end of project, clear of debris: NA (A) N21L_2019_r_0010: Station_1 29+00: Station_2 11+00: Trees and vegetation on right bank from Island Park to 500' upstream of Island Park pedestrian bridge.: Remove trees and vegetation. (M) N21L_2019_r_0018: Station_1 104+00: Station_2 106+00: Vegetation in excess of 12" on right bank of channel just downstream of golf course pedestrian bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0019: Station_1 105+00: Station_2 104+00: Vegetation in excess of 12" on left bank of channel just downstream of golf course pedestrian bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0021: Station_1 103+00: Station_2 101+00: Vegetation in excess of 12" on right bank of channel from golf course pedestrian bridge to Bolivar Road bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0024: Station_1 100+00: Trees on right bank channel sideslope 900' downstream of Bolivar Street bridge.: Remove trees. (M) N21L_2019_r_0025: Station_1 104+00: Station_2 103+00: Vegetation in excess of 12" on left bank of channel from golf course pedestrian bridge to Bolivar Road bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0027: Station_1 94+00: Vegetation in excess of 12" on right bank of channel 280' downstream from Bolivar Road Bridge.: Mow vegetation to 3"-6" height. (M) N21L_2019_r_0036: Station_1 85+00: Unauthorized alteration (E-5): River Walk Trail kiosk on left bank channel crest.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0044: Station_1 84+00: Station_2 44+00:

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				Unwanted vegetation on both bank sideslopes from 750' upstream of Bolivar Road bridge to Madison Street bridge.: Remove unwanted vegetation. (M) N21L_2019_r_0095: Station_1 46+00: Station_2 44+00: Trees on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.: Remove trees. (M) N21L_2019_r_0103: Station_1 37+00: Unwanted vegetation on left bank from State Street Bridge to 400' downstream.: Mow vegetation to 3"-6" height. (M)
2. Shoaling ¹ (sediment deposition)	U	A	No shoaling or minor, non-vegetated shoaling is present.	N21L_2019_r_0004: Station_1 0+00: Significant vegetated shoal (S-11) and trees in channel on right bank from 100'-700' downstream of upstream limit weir.: Remove shoaling. (U)
		M	More widespread vegetated and non-vegetated shoaling is present. Non-aquatic grasses are present on shoal. No trees or brush is present on shoal, and channel flow is not significantly reduced. Sediment and debris removal recommended.	N21L_2019_r_0007: Station_1 3+00: Minor shoaling (S-10) downstream of barrier levee weir.: Remove shoal. (M)
		U	Shoaling is well established, stabilized by saplings, brush, or other vegetation. Shoals are diverting flow to channel walls. Channel flow capacity is reduced and maintenance is required.	N21L_2019_r_0012: Station_1 17+00: Station_2 21+00: Shoal (S-9) along left bank toe from 450' downstream of Island Park pedestrian walkway bridge to Island Park Pedestrian Walkway Bridge.: Remove shoaling. (M) N21L_2019_r_0017: Station_1 111+00: Station_2 106+00: Grassy shoal (S-1) along right bank from 225' to 700' downstream of golf course pedestrian bridge.: Remove shoaling. (M) N21L_2019_r_0022: Station_1 103+00: Station_2 92+00: Four alternating vegetated shoals (S-2, S-3, S-4, S-5) on both banks from green golf course pedestrian bridge to Bolivar Road Bridge.: Remove shoals. (M) N21L_2019_r_0038: Station_1 83+00: Station_2 78+00: Shoaling (S-6) along right bank from 750' to 1,300' upstream of Bolivar Road bridge (near plaza):. Remove shoaling. (M) N21L_2019_r_0064: Station_1 60+00: Station_2 56+00: Shoal (S-7) on left bank toe, not part of as-built project (189-WEL-2/5):. Remove Shoal. (M) N21L_2019_r_0086: Station_1 49+00: Station_2 0+00: Minor shoaling (S-8) along left bank channel toe from 600' downstream of Madison Street (Stevens Street) bridge to State Street bridge.: Remove shoaling. (M) N21L_2019_r_0106: Station_1 D 0+00: Station_2 35+00: Minor shoal along right bank channel toe just downstream of State Street Bridge.: Remove shoal. (M) N21L_2019_r_0143: Station_1 0+00: Station_2 0+00:

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				Significant vegetated shoaling (S-12) on right bank from 50' to 225' upstream of upstream limit weir.: Remove shoaling. (U) N21L_2019_r_0146: Station_1 0+00: Significant vegetated shoaling (S-13) with trees in center of channel just upstream of upstream limit weir.: Remove shoaling. (U)
3. Encroachments	U	A	No trash, debris, unauthorized structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the channel.	N21L_2019_r_0016: Station_1 104+00: Unauthorized alteration (E-2): Green golf course pedestrian bridge 1,250' downstream of Boliver Road bridge. NYSDEC says permitted (need to verify):. Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0020: Station_1 104+00: Unauthorized alteration (E-1): new pump station building, riprap, intake pipe to pump station, and feeder pipes for golf course water just downstream of pedestrian bridge.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0026: Station_1 100+00: Station_2 93+00: Unauthorized alteration (E-3): riprap on right bank toe from 300' upstream of pedestrian bridge to 300 feet downstream of Bolivar Street bridge.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0030: Station_1 92+00: Authorized alteration: recreational trail under construction onleft bank under bridge connecting River Walk Trail to Bolivar Road.: USACE is processing Section 408 Alteration Request. (A) N21L_2019_r_0033: Station_1 90+00: Station_2 76+00: Unauthorized alteration (E-4): River Walk Trail encroachment (benches and lightposts are not encroachments) along left bank from Bolivar Road Bridge to 1,775 feet upstream of Bolivar Road Bridge.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0035: Station_1 88+00: Unauthorized alteration (E-6): 42" outfall on left bank 300' upstream of Bolivar Road bridge. NYSDEC says permitted.: Submit Section 408 Alteration Request to USACE or verify USACE permission. (M) N21L_2019_r_0037: Station_1 84+00: Station_2 68+00: Unauthorized alteration (E-47a): Riprap added to left bank channel toe.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0039: Station_1 82+00: Unauthorized alteration (E-7): 42" outfall on left bank 900' upstream of
		M	Trash, debris, unauthorized structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the channel.	

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Rated Item	Rating	Rating Guidelines	Location/Remarks/Recommendations
			<p>Bolivar Road Bridge at plaza. NYSDEC says permitted.: Submit Section 408 Alteration Request to USACE or verify USACE permission. (M)</p> <p>N21L_2019_r_0041: Station_1 77+00: Unauthorized alteration (E-8): pet sign and post encroachment on left bank channel crest.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0042: Station_1 75+00: Unauthorized alteration: 24" CMP encroachment on left bank 1,600' upstream of Bolivar Road bridge (just downstream of access drive).: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0045: Station_1 75+00: Unauthorized alteration (E-10): asphalt access drive and gate on left bank just downstream of Seneca Street.: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0046: Station_1 74+00: Project infrastructure: utility pole and 2 guy wires on left bank channel crest 1,700' upstream of Bolivar Road bridge (just upstream of asphalt drive).: NA (A)</p> <p>N21L_2019_r_0047: Station_1 73+00: Unauthorized alteration (E-12): guy wire for utility pole on left bank channel crest at Seneca Street (utility pole not an encroachment).: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0048: Station_1 71+00: Unauthorized alteration (E-9): stone along left bank channel crest at 82 Seneca Street.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0050: Station_1 72+00: Station_2 69+00: Unauthorized alteration (E-13): misc. landscaping timbers at 92 Seneca Street.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0051: Station_1 69+00: Vegetation obstructions in Chamberlain Street drainage ditch to river.: Remove vegetation obstructions. (M)</p> <p>N21L_2019_r_0058: Station_1 65+00: Project infrastructure: gage house on left bank 2,230' downstream of Madison Street (Stevens Street) Bridge.: As-Built Drawing Number 189-WEL-2/5 (Sheet 8 of 13) (A)</p> <p>N21L_2019_r_0089: Station_1 46+00: Unauthorized alteration (E-26): Pearl Street bridge removed.: Submit Section 408 Alteration Request to USACE. (M)</p>

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Rated Item	Rating	Rating Guidelines	Location/Remarks/Recommendations
			<p>N21L_2019_r_0091: Station_1 46+00: Unauthorized alteration (E-27): pipe line bridge just downstream of Steven Street bridge has been removed.: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0094: Station_1 46+00: Station_2 44+00: Unauthorized alteration (E-28): chain link fence on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0099: Station_1 36+00: Unauthorized alteration (E-35): concrete siphon gatewell on right bank channel sideslope (across from school). NYSDEC says permitted.: Submit Section 408 Alteration Request to USACE or verify USACE permission. (M)</p> <p>N21L_2019_r_0101: Station_1 38+00: Unauthorized alteration (E-32): fence (covered in unwanted vegetation) 300' downstream of State Street bridge .: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0102: Station_1 37+00: Unauthorized alteration (E-33): Wellsville High School gaurdail, parking lot, and 2 signs on left bank levee downstream of State Street bridge. Blocks O&M access, per NYSDEC.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0104: Station_1 35+00: Unauthorized alteration (E-34): 2 utility poles 6 guy wires just downstream of State Street bridge (NYSDEC says permitted).: Submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0105: Station_1 34+00: Unauthorized alteration (E-36): 18" HDPE outfall and duck bill valve on left bank side slope just downstream of State Street bridge owned by NYSDOT. (NYSDEC says permitted): Submit Section 408 Alteration Request to USACE or verify USACE permission. (M)</p> <p>N21L_2019_r_0107: Station_1 35+00: Maintenance gate installed by sponsor for access.: NA (A)</p> <p>N21L_2019_r_0116: Station_1 26+00: Unauthorized alteration (E-40): unidentified drainage structure (metal man hole) on channel side slope on left bank, just upstream of Steel Sheet Pile Weir.: Remove or submit Section 408 Alteration Request to USACE. (M)</p> <p>N21L_2019_r_0117: Station_1 22+00: Unauthorized alteration (E-43): Parking lot and wooden post barrier on right bank in Island Park 500' upstream of Steel Sheet Pile</p>

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				Weir. Posts and wire rope restrict access.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0118: Station_1 25+00: Unauthorized alteration (E-41): Wooden observation platform and fence on right bank 200' upstream of Steel Sheet Pile Weir.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0131: Station_1 21+00: Station_2 17+00: Unauthorized alteration (E-44): riprap added on right bank toe at island park adjacent to parking area.: Remove or submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0136: Station_1 0+00: Station_2 13+00: Unauthorized alteration (E-45): Wellsville, Addison, & Galetton Railroad gravel trailway (from Island Park pedestrian bridge to barrier levee weir) and signs on left bank near stone blocks blocking access to channel crest.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0137: Station_1 6+00: Unauthorized alteration (E-46): Wellsville, Addison, & Galetton Railroad trailway stone blocks obstructing access 575' downstream of barrier levee weir.: Remove or submit Section 408 Alteration Request to USACE. (U) N21L_2019_r_0141: Station_1 0+00: 12" cast iron pipe encroachment on left bank, 125' upstream of barrier levee weir.: No alteration request needed for channel pipes less than or equal to 12". (A) N21L_2019_r_0145: Station_1 0+00: Unauthorized alteration (E-47): barbed wire fence and metal gate on right bank at upstream limit weir.: Remove or submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0148: Station_1 100+00: Unauthorized alteration: 24" culvert on left bank, 400' upstream of pedestrian bridge.: Submit Section 408 Alteration Request to USACE. (M) N21L_2019_r_0149: Station_1 100+00: Unauthorized alteration: 36" culvert on left bank, 400' upstream of pedestrian bridge.: Submit Section 408 Alteration Request to USACE. (M)
4. Erosion	M	A	No head cutting or horizontal deviation observed.	N21L_2019_r_0023: Station_1 100+00: Erosion at two outfalls on left bank, 400' upstream of pedestrian bridge.: Repair erosion. (M)
		M	Head cutting and horizontal deviation evident, but is less than 1 foot from the designed grade or cross section.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	Head cutting and horizontal deviation of more than 1 foot from the designed grade or cross section. Corrective actions required to stop or slow erosion.	N21L_2019_r_0029: Station_1 96+00: Station_2 91+00: Side slope erosion along left bank toe starting at Bolivar Road bridge and continuing 425' downstream.: Repair erosion. (M) N21L_2019_r_0098: Station_1 39+00: Culvert on right bank, 280' upstream of the Madison Street Bridge, is causing an erosion pocket at the top of the concrete line channel.: Repair erosion pocket and protect channel side slope from culvert discharge. (M)
5. Concrete Surfaces	A	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	
		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the channel.	
6. Tilting, Sliding or Settlement of Concrete Structures ²	A	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the channel.	
7. Foundation of	A	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
Concrete Structures ³		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. For the purposes of inspection, the erosion or scour is not closer to the riverside face of the wall than twice the floodwall's underground base width if the wall is of L-wall or T-wall construction; or if the wall is of sheetpile or I-wall construction, the erosion is not closer than twice the wall's visible height. Additionally, rate of erosion is such that the wall is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that is closer to the wall than the limits described above, or is outside these limits but may lead to structural instabilities before the next inspection. Additionally, if the floodwall is of I-wall or sheetpile construction, the foundation is unacceptable if any turf, soil or pavement material got washed away from the landside of the I-wall as the result of a previous overtopping event.	
		N/A	There are no concrete items in the channel.	
8. Slab and Monolith Joints	A	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no concrete items in the channel.	
9. Flap Gates/ Flap Valves/ Pinch Valves ⁴	A	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	
10. Riprap Revetments & Banks	U	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	N21L_2019_r_0002: Station_1 0+00: Station_2 0+00: Trees and vegetation in riprap on left bank upstream and downstream of upstream limit weir.: Remove trees and vegetation from riprap. (U) N21L_2019_r_0006: Station_1 6+00: Station_2 0+00:
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	Woody vegetation in riprap on left bank from barrier levee weir to 550' downstream.: Remove woody vegetation from riprap. (M)
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	N21L_2019_r_0011: Station_1 17+00: Station_2 16+00: Trees and vegetation in riprap on left bank around both sides of Island Park Pedestrian Walkway Bridge: Remove trees and vegetation from riprap. (M) N21L_2019_r_0028: Station_1 91+00: Station_2 91+00: Trees and vegetation in riprap on right bank around both sides of Bolivar Road bridge.: Remove trees and vegetation from riprap. (M) N21L_2019_r_0049: Station_1 72+00: Station_2 66+00: Vegetation in left bank riprap from Drop Structure to 500' downstream.: Remove vegetation from riprap. (U) N21L_2019_r_0056: Station_1 66+00: Vegetation in riprap on both banks around drop structure.: Remove vegetation in riprap. (M) N21L_2019_r_0057: Station_1 65+00: Station_2 52+00: Trees and vegetation in riprap on left bank channel side slope from Drop Structure to 1,000' upstream.: Remove trees and vegetation from riprap. (U) N21L_2019_r_0063: Station_1 59+00: Station_2 56+00: Trees and vegetation in riprap on right bank from 1,600' to 1,300' downstream of Madison Street (Stevens Street) bridge.: Remove trees and vegetation from riprap. (M) N21L_2019_r_0108: Station_1 33+00: Station_2 24+00: Trees and vegetation in riprap on left bank channel side slope from State Street bridge to 1,250' upstream.: Remove trees and vegetation from riprap. (U) N21L_2019_r_0139: Station_1 0+00: Station_2 0+00: Trees and vegetation in riprap on right bank from barrier levee weir to 500' upstream of barrier levee weir.: Remove trees and vegetation from riprap. (U) N21L_2019_r_0140: Station_1 4+00: Station_2 0+00: Vegetation in riprap on right bank from 400' downstream of upstream limit weir to barrier levee weir.: Remove vegetation from riprap. (U) N21L_2019_r_0144: Station_1 0+00: Station_2 0+00: Trees and vegetation in riprap on right bank from upstream limit weir to 300' upstream.: Remove trees and vegetation from riprap. (U)
11. Revetments other	A	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
than Riprap		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

¹ If weather and flow conditions allow, inspectors should walk in the channel and probe shoal areas in order to estimate extent of blockage of the cross-sectional area where shoaling is present.

² The sponsor should be monitoring any observed movement to verify whether the movement is active or inactive.

³ Inspectors must have as-built drawings available during the inspection so that the lateral distance to the heel and toe of the floodwalls can be determined in the field.

⁴ Proper operation of this item must be demonstrated during the inspection.

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	<p>Inspect ID: N21L_2019_r_0001 Title: USACE_CELRB_N21L_2019_r_0001_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Tree debris on right bank at upstream limit weir.; Action: Remove tree debris.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0003 Title: USACE_CELRB_N21L_2019_r_0003_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Unacceptable; Remarks: Trees and vegetation on right bank sideslope from 400' downstream of upstream limit weir to upstream limit weir.; Action: Remove vegetation.; Station_1: 0+00; Station_2: 0+00</p>



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	<p>Inspect ID: N21L_2019_r_0005 Title: USACE_CELRB_N21L_2019_r_0005_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Unacceptable; Remarks: Trees and vegetation on left bank 175' upstream of barrier levee weir.; Action: Remove trees and mow vegetation to 3"-6" height.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0008 Title: USACE_CELRB_N21L_2019_r_0008_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Acceptable; Remarks: Weir structure at barrier levee ("barrier levee weir") at upstream end of project, clear of debris; Action: NA; Station_1: 0+00</p>



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	<p>Inspect ID: N21L_2019_r_0010 Title: USACE_CELRB_N21L_2019_r_0010_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Trees and vegetation on right bank from Island Park to 500' upstream of Island Park pedestrian bridge.; Action: Remove trees and vegetation.; Station_1: 29+00; Station_2: 11+00</p>
	<p>Inspect ID: N21L_2019_r_0010 Title: USACE_CELRB_N21L_2019_r_0010_2.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Trees and vegetation on right bank from Island Park to 500' upstream of Island Park pedestrian bridge.; Action: Remove trees and vegetation.; Station_1: 29+00; Station_2: 11+00</p>



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Inspect ID: N21L_2019_r_0010 **Title:** USACE_CELRB_N21L_2019_r_0010_3.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
 Remarks: Trees and vegetation on right bank from Island Park to 500' upstream of Island Park pedestrian bridge.; Action: Remove trees and vegetation.; Station_1: 29+00; Station_2: 11+00



Inspect ID: N21L_2019_r_0018 **Title:** USACE_CELRB_N21L_2019_r_0018_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
 Remarks: Vegetation in excess of 12" on right bank of channel just downstream of golf course pedestrian bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 104+00; Station_2: 106+00



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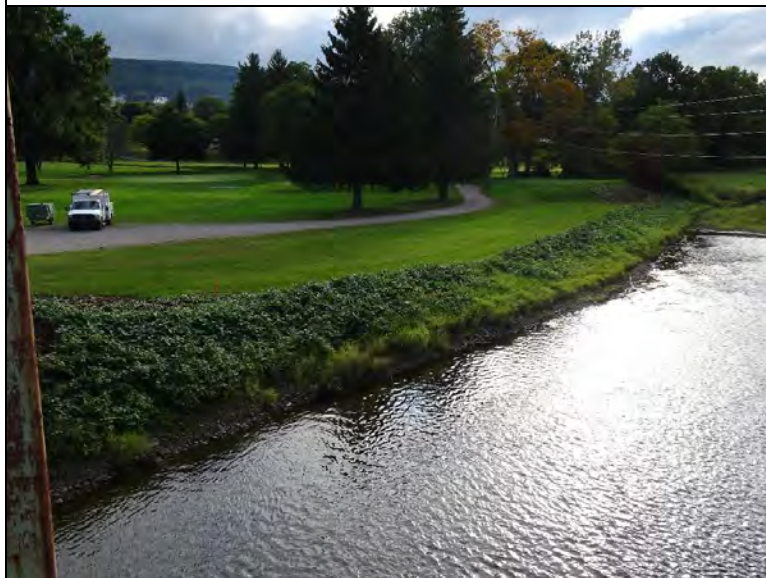
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Inspect ID: N21L_2019_r_0019 **Title:** USACE_CELRB_N21L_2019_r_0019_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Vegetation in excess of 12" on left bank of channel just downstream of golf course pedestrian bridge.; **Action:** Mow vegetation to 3"-6" height.; **Station_1:** 105+00;
Station_2: 104+00



Inspect ID: N21L_2019_r_0021 **Title:** USACE_CELRB_N21L_2019_r_0021_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Vegetation in excess of 12" on right bank of channel from golf course pedestrian bridge to Bolivar Road bridge.; **Action:** Mow vegetation to 3"-6" height.;
Station_1: 103+00; **Station_2:** 101+00



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	<p>Inspect ID: N21L_2019_r_0024 Title: USACE_CELRB_N21L_2019_r_0024_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Trees on right bank channel sideslope 900' downstream of Bolivar Street bridge.; Action: Remove trees.; Station_1: 100+00</p>
	<p>Inspect ID: N21L_2019_r_0025 Title: USACE_CELRB_N21L_2019_r_0025_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank of channel from golf course pedestrian bridge to Bolivar Road bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 104+00; Station_2: 103+00</p>



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	<p>Inspect ID: N21L_2019_r_0025 Title: USACE_CELRB_N21L_2019_r_0025_2.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank of channel from golf course pedestrian bridge to Bolivar Road bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 104+00; Station_2: 103+00</p>
	<p>Inspect ID: N21L_2019_r_0027 Title: USACE_CELRB_N21L_2019_r_0027_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on right bank of channel 280' downstream from Bolivar Road Bridge.; Action: Mow vegetation to 3"-6" height.; Station_1: 94+00</p>



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Inspect ID: N21L_2019_r_0027 **Title:** USACE_CELRB_N21L_2019_r_0027_2.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Vegetation in excess of 12" on right bank of channel 280' downstream from Bolivar Road Bridge.; **Action:** Mow vegetation to 3"-6" height.; **Station_1:** 94+00



Inspect ID: N21L_2019_r_0036 **Title:** USACE_CELRB_N21L_2019_r_0036_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Unauthorized alteration (E-5): River Walk Trail kiosk on left bank channel crest.; **Action:** Submit Section 408 Alteration Request to USACE.; **Station_1:** 85+00



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	<p>Inspect ID: N21L_2019_r_0044 Title: USACE_CELRB_N21L_2019_r_0044_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Unwanted vegetation on both bank sideslopes from 750' upstream of Bolivar Road bridge to Madison Street bridge.; Action: Remove unwanted vegetation.; Station_1: 84+00; Station_2: 44+00</p>
	<p>Inspect ID: N21L_2019_r_0095 Title: USACE_CELRB_N21L_2019_r_0095_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Trees on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.; Action: Remove trees.; Station_1: 46+00; Station_2: 44+00</p>



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Inspect ID: N21L_2019_r_0103 **Title:** USACE_CELRB_N21L_2019_r_0103_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Unwanted vegetation on left bank from State Street Bridge to 400'
downstream.; **Action:** Mow vegetation to 3"-6" height.; **Station_1:** 37+00



Inspect ID: N21L_2019_r_0103 **Title:** USACE_CELRB_N21L_2019_r_0103_2.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
Remarks: Unwanted vegetation on left bank from State Street Bridge to 400'
downstream.; **Action:** Mow vegetation to 3"-6" height.; **Station_1:** 37+00



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	<p>Inspect ID: N21L_2019_r_0004 Title: USACE_CELRB_N21L_2019_r_0004_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Significant vegetated shoal (S-11) and trees in channel on right bank from 100'-700' downstream of upstream limit weir.; Action: Remove shoaling.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0004 Title: USACE_CELRB_N21L_2019_r_0004_2.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Significant vegetated shoal (S-11) and trees in channel on right bank from 100'-700' downstream of upstream limit weir.; Action: Remove shoaling.; Station_1: 0+00</p>



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	<p>Inspect ID: N21L_2019_r_0007 Title: USACE_CELRB_N21L_2019_r_0007_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Minor shoaling (S-10) downstream of barrier levee weir.; Action: Remove shoal.; Station_1: 3+00</p>
	<p>Inspect ID: N21L_2019_r_0012 Title: USACE_CELRB_N21L_2019_r_0012_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Shoal (S-9) along left bank toe from 450' downstream of Island Park pedestrian walkway bridge to Island Park Pedestrian Walkway Bridge.; Action: Remove shoaling.; Station_1: 17+00; Station_2: 21+00</p>



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	<p>Inspect ID: N21L_2019_r_0017 Title: USACE_CELRB_N21L_2019_r_0017_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Grassy shoal (S-1) along right bank from 225' to 700' downstream of golf course pedestrian bridge.; Action: Remove shoaling.; Station_1: 111+00; Station_2: 106+00</p>
	<p>Inspect ID: N21L_2019_r_0022 Title: USACE_CELRB_N21L_2019_r_0022_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Four alternating vegetated shoals (S-2, S-3, S-4, S-5) on both banks from green golf course pedestrian bridge to Bolivar Road Bridge.; Action: Remove shoals.; Station_1: 103+00; Station_2: 92+00</p>



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	<p>Inspect ID: N21L_2019_r_0022 Title: USACE_CELRB_N21L_2019_r_0022_2.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Four alternating vegetated shoals (S-2, S-3, S-4, S-5) on both banks from green golf course pedestrian bridge to Bolivar Road Bridge.; Action: Remove shoals.; Station_1: 103+00; Station_2: 92+00</p>
	<p>Inspect ID: N21L_2019_r_0022 Title: USACE_CELRB_N21L_2019_r_0022_3.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Four alternating vegetated shoals (S-2, S-3, S-4, S-5) on both banks from green golf course pedestrian bridge to Bolivar Road Bridge.; Action: Remove shoals.; Station_1: 103+00; Station_2: 92+00</p>



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	<p>Inspect ID: N21L_2019_r_0038 Title: USACE_CELRB_N21L_2019_r_0038_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Shoaling (S-6) along right bank from 750' to 1,300' upstream of Bolivar Road bridge (near plaza).; Action: Remove shoaling.; Station_1: 83+00; Station_2: 78+00</p>
	<p>Inspect ID: N21L_2019_r_0064 Title: USACE_CELRB_N21L_2019_r_0064_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Shoal (S-7) on left bank toe, not part of as-built project (189-WEL-2/5).; Action: Remove Shoal.; Station_1: 60+00; Station_2: 56+00</p>



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Inspect ID: N21L_2019_r_0086 **Title:** USACE_CELRB_N21L_2019_r_0086_1.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Minimally Acceptable;
Remarks: Minor shoaling (S-8) along left bank channel toe from 600' downstream of Madison Street (Stevens Street) bridge to State Street bridge.; **Action:** Remove shoaling.;
Station_1: 49+00; **Station_2:** 0+00



Inspect ID: N21L_2019_r_0106 **Title:** USACE_CELRB_N21L_2019_r_0106_1.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Minimally Acceptable;
Remarks: Minor shoal along right bank channel toe just downstream of State Street Bridge.; **Action:** Remove shoal.; **Station_1:** D 0+00; **Station_2:** 35+00



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	<p>Inspect ID: N21L_2019_r_0143 Title: USACE_CELRB_N21L_2019_r_0143_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Significant vegetated shoaling (S-12) on right bank from 50' to 225' upstream of upstream limit weir.; Action: Remove shoaling.; Station_1: 0+00; Station_2: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0146 Title: USACE_CELRB_N21L_2019_r_0146_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Significant vegetated shoaling (S-13) with trees in center of channel just upstream of upstream limit weir.; Action: Remove shoaling.; Station_1: 0+00</p>



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	<p>Inspect ID: N21L_2019_r_0146 Title: USACE_CELRB_N21L_2019_r_0146_2.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Significant vegetated shoaling (S-13) with trees in center of channel just upstream of upstream limit weir.; Action: Remove shoaling.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0016 Title: USACE_CELRB_N21L_2019_r_0016_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-2): Green golf course pedestrian bridge 1,250' downstream of Boliver Road bridge. NYSDEC says permitted (need to verify).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 104+00</p>



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Inspect ID: N21L_2019_r_0020 **Title:** USACE_CELRB_N21L_2019_r_0020_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-1): new pump station building, riprap, intake pipe to pump station, and feeder pipes for golf course water just downstream of pedestrian bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 104+00



Inspect ID: N21L_2019_r_0026 **Title:** USACE_CELRB_N21L_2019_r_0026_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-3): riprap on right bank toe from 300' upstream of pedestrian bridge to 300 feet downstream of Bolivar Street bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 100+00; Station_2: 93+00



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Inspect ID: N21L_2019_r_0033 **Title:** USACE_CELRB_N21L_2019_r_0033_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-4): River Walk Trail encroachment (benches and lightposts are not encroachments) along left bank from Bolivar Road Bridge to 1,775 feet upstream of Bolivar Road Bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 90+00; Station_2: 76+00



Inspect ID: N21L_2019_r_0035 **Title:** USACE_CELRB_N21L_2019_r_0035_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-6): 42" outfall on left bank 300' upstream of Bolivar Road bridge. NYSDEC says permitted.; Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 88+00



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Inspect ID: N21L_2019_r_0037 **Title:** USACE_CELRB_N21L_2019_r_0037_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-47a): Riprap added to left bank channel toe.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 84+00; Station_2: 68+00



Inspect ID: N21L_2019_r_0039 **Title:** USACE_CELRB_N21L_2019_r_0039_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-7): 42" outfall on left bank 900' upstream of Bolivar Road Bridge at plaza. NYSDEC says permitted.; Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 82+00



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	<p>Inspect ID: N21L_2019_r_0041 Title: USACE_CELRB_N21L_2019_r_0041_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-8): pet sign and post encroachment on left bank channel crest.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 77+00</p>
	<p>Inspect ID: N21L_2019_r_0042 Title: USACE_CELRB_N21L_2019_r_0042_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration: 24" CMP encroachment on left bank 1,600' upstream of Bolivar Road bridge (just downstream of access drive).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 75+00</p>



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	<p>Inspect ID: N21L_2019_r_0045 Title: USACE_CELRB_N21L_2019_r_0045_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-10): asphalt access drive and gate on left bank just downstream of Seneca Street.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 75+00</p>
	<p>Inspect ID: N21L_2019_r_0046 Title: USACE_CELRB_N21L_2019_r_0046_1.jpg Rated Item: 3. Encroachments Caption: Rating: Acceptable; Remarks: Project infrastructure: utility pole and 2 guy wires on left bank channel crest 1,700' upstream of Boliver Road bridge (just upstream of asphalt drive).; Action: NA; Station_1: 74+00</p>



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	<p>Inspect ID: N21L_2019_r_0047 Title: USACE_CELRB_N21L_2019_r_0047_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-12): guy wire for utility pole on left bank channel crest at Seneca Street (utility pole not an encroachment).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 73+00</p>
	<p>Inspect ID: N21L_2019_r_0048 Title: USACE_CELRB_N21L_2019_r_0048_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-9): stone along left bank channel crest at 82 Seneca Street.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 71+00</p>



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Inspect ID: N21L_2019_r_0050 **Title:** USACE_CELRB_N21L_2019_r_0050_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-13): misc. landscaping timbers at 92 Seneca Street. ; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 72+00; Station_2: 69+00



Inspect ID: N21L_2019_r_0051 **Title:** USACE_CELRB_N21L_2019_r_0051_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Vegetation obstructions in Chamberlain Street drainage ditch to river.; Action: Remove vegetation obstructions.; Station_1: 69+00



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	<p>Inspect ID: N21L_2019_r_0089 Title: USACE_CELRB_N21L_2019_r_0089_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-26): Pearl Street bridge removed.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 46+00</p>
	<p>Inspect ID: N21L_2019_r_0091 Title: USACE_CELRB_N21L_2019_r_0091_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-27): pipe line bridge just downstream of Steven Street bridge has been removed.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 46+00</p>



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	<p>Inspect ID: N21L_2019_r_0094 Title: USACE_CELRB_N21L_2019_r_0094_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-28): chain link fence on left bank channel crest from 250' downstream of Madison Street (Stevens Street) bridge to Madison Street bridge.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 46+00; Station_2: 44+00</p>
	<p>Inspect ID: N21L_2019_r_0099 Title: USACE_CELRB_N21L_2019_r_0099_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-35): concrete siphon gatewell on right bank channel sideslope (across from school). NYSDEC says permitted.; Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 36+00</p>



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	<p>Inspect ID: N21L_2019_r_0101 Title: USACE_CELRB_N21L_2019_r_0101_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-32): fence (covered in unwanted vegetation) 300' downstream of State Street bridge .; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 38+00</p>
	<p>Inspect ID: N21L_2019_r_0102 Title: USACE_CELRB_N21L_2019_r_0102_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-33): Wellsville High School gaurdrail, parking lot, and 2 signs on left bank levee downstream of State Street bridge. Blocks O&M access, per NYSDEC.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 37+00</p>



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Inspect ID: N21L_2019_r_0104 **Title:** USACE_CELRB_N21L_2019_r_0104_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-34): 2 utility poles 6 guy wires just downstream of State Street bridge (NYSDEC says permitted).; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 35+00



Inspect ID: N21L_2019_r_0105 **Title:** USACE_CELRB_N21L_2019_r_0105_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-36): 18" HDPE outfall and duck bill valve on left bank side slope just downstream of State Street bridge owned by NYSDOT. (NYSDEC says permitted); Action: Submit Section 408 Alteration Request to USACE or verify USACE permission.; Station_1: 34+00



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	<p>Inspect ID: N21L_2019_r_0116 Title: USACE_CELRB_N21L_2019_r_0116_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-40): unidentified drainage structure (metal man hole) on channel side slope on left bank, just upstream of Steel Sheet Pile Weir.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 26+00</p>
	<p>Inspect ID: N21L_2019_r_0117 Title: USACE_CELRB_N21L_2019_r_0117_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-43): Parking lot and wooden post barrier on right bank in Island Park 500' upstream of Steel Sheet Pile Weir. Posts and wire rope restrict access.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 22+00</p>



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Inspect ID: N21L_2019_r_0118 **Title:** USACE_CELRB_N21L_2019_r_0118_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-41): Wooden observation platform and fence on right bank 200' upstream of Steel Sheet Pile Weir.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 25+00



Inspect ID: N21L_2019_r_0131 **Title:** USACE_CELRB_N21L_2019_r_0131_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-44): riprap added on right bank toe at island park adjacent to parking area.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 21+00; Station_2: 17+00



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	<p>Inspect ID: N21L_2019_r_0136 Title: USACE_CELRB_N21L_2019_r_0136_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-45): Wellsville, Addison, & Galetton Railroad gravel railway (from Island Park pedestrian bridge to barrier levee weir) and signs on left bank near stone blocks blocking access to channel crest.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 0+00; Station_2: 13+00</p>
	<p>Inspect ID: N21L_2019_r_0137 Title: USACE_CELRB_N21L_2019_r_0137_1.jpg Rated Item: 3. Encroachments Caption: Rating: Unacceptable; Remarks: Unauthorized alteration (E-46): Wellsville, Addison, & Galetton Railroad railway stone blocks obstructing access 575' downstream of barrier levee weir.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 6+00</p>



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	<p>Inspect ID: N21L_2019_r_0145 Title: USACE_CELRB_N21L_2019_r_0145_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-47): barbed wire fence and metal gate on right bank at upstream limit weir.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0148 Title: USACE_CELRB_N21L_2019_r_0148_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration: 24" culvert on left bank, 400' upstream of pedestrian bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 100+00</p>



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	<p>Inspect ID: N21L_2019_r_0149 Title: USACE_CELRB_N21L_2019_r_0149_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration: 36" culvert on left bank, 400' upstream of pedestrian bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 100+00</p>
	<p>Inspect ID: N21L_2019_r_0023 Title: USACE_CELRB_N21L_2019_r_0023_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Erosion at two outfalls on left bank, 400' upstream of pedestrian bridge.; Action: Repair erosion.; Station_1: 100+00</p>



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	<p>Inspect ID: N21L_2019_r_0029 Title: USACE_CELRB_N21L_2019_r_0029_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Side slope erosion along left bank toe starting at Bolivar Road bridge and continuing 425' downstream.; Action: Repair erosion.; Station_1: 96+00; Station_2: 91+00</p>
	<p>Inspect ID: N21L_2019_r_0098 Title: USACE_CELRB_N21L_2019_r_0098_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Culvert on right bank, 280' upstream of the Madison Street Bridge, is causing an erosion pocket at the top of the concrete line channel.; Action: Repair erosion pocket and protect channel side slope from culvert discharge.; Station_1: 39+00</p>



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	<p>Inspect ID: N21L_2019_r_0002 Title: USACE_CELRB_N21L_2019_r_0002_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and vegetation in riprap on left bank upstream and downstream of upstream limit weir.; Action: Remove trees and vegetation from riprap.; Station_1: 0+00; Station_2: 0+00</p>
	<p>Inspect ID: N21L_2019_r_0002 Title: USACE_CELRB_N21L_2019_r_0002_2.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and vegetation in riprap on left bank upstream and downstream of upstream limit weir.; Action: Remove trees and vegetation from riprap.; Station_1: 0+00; Station_2: 0+00</p>



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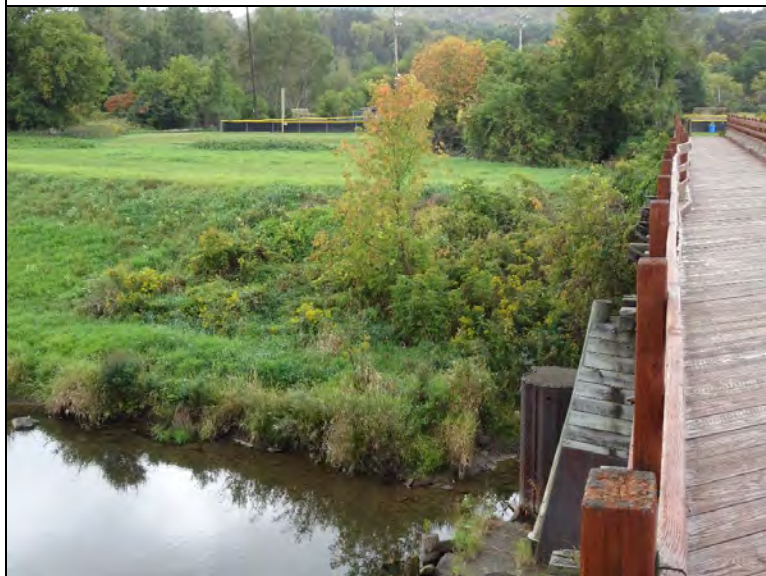
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Inspect ID: N21L_2019_r_0006 **Title:** USACE_CELRB_N21L_2019_r_0006_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Minimally Acceptable;
Remarks: Woody vegetation in riprap on left bank from barrier levee weir to 550'
downstream.; **Action:** Remove woody vegetation from riprap.; **Station_1:** 6+00;
Station_2: 0+00



Inspect ID: N21L_2019_r_0011 **Title:** USACE_CELRB_N21L_2019_r_0011_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Minimally Acceptable;
Remarks: Trees and vegetation in riprap on left bank around both sides of Island Park
Pedestrian Walkway Bridge; **Action:** Remove trees and vegetation from riprap.;
Station_1: 17+00; **Station_2:** 16+00



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Inspect ID: N21L_2019_r_0011 **Title:** USACE_CELRB_N21L_2019_r_0011_2.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Minimally Acceptable;
Remarks: Trees and vegetation in riprap on left bank around both sides of Island Park Pedestrian Walkway Bridge; **Action:** Remove trees and vegetation from riprap.;
Station_1: 17+00; **Station_2:** 16+00



Inspect ID: N21L_2019_r_0028 **Title:** USACE_CELRB_N21L_2019_r_0028_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Minimally Acceptable;
Remarks: Trees and vegetation in riprap on right bank around both sides of Bolivar Road bridge.; **Action:** Remove trees and vegetation from riprap.; **Station_1:** 91+00; **Station_2:** 91+00



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Inspect ID: N21L_2019_r_0049 **Title:** USACE_CELRB_N21L_2019_r_0049_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Vegetation in left bank riprap from Drop Structure to 500' downstream.; Action: Remove vegetation from riprap.; Station_1: 72+00; Station_2: 66+00



Inspect ID: N21L_2019_r_0056 **Title:** USACE_CELRB_N21L_2019_r_0056_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Minimally Acceptable; Remarks: Vegetation in riprap on both banks around drop structure.; Action: Remove vegetation in riprap.; Station_1: 66+00



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	<p>Inspect ID: N21L_2019_r_0057 Title: USACE_CELRB_N21L_2019_r_0057_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and vegetation in riprap on left bank channel side slope from Drop Structure to 1,000' upstream.; Action: Remove trees and vegetation from riprap.; Station_1: 65+00; Station_2: 52+00</p>
	<p>Inspect ID: N21L_2019_r_0063 Title: USACE_CELRB_N21L_2019_r_0063_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Minimally Acceptable; Remarks: Trees and vegetation in riprap on right bank from 1,600' to 1,300' downstream of Madison Street (Stevens Street) bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 59+00; Station_2: 56+00</p>



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Flood Damage Reduction Segment / System
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	<p>Inspect ID: N21L_2019_r_0063 Title: USACE_CELRB_N21L_2019_r_0063_2.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Minimally Acceptable; Remarks: Trees and vegetation in riprap on right bank from 1,600' to 1,300' downstream of Madison Street (Stevens Street) bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 59+00; Station_2: 56+00</p>
	<p>Inspect ID: N21L_2019_r_0108 Title: USACE_CELRB_N21L_2019_r_0108_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rated Item: 12. Riprap Revetments & Bank Protection; Rating: Unacceptable; Remarks: Trees and vegetation in riprap on left bank channel side slope from State Street bridge to 1,250' upstream.; Action: Remove trees and vegetation from riprap.; Station_1: 33+00; Station_2: 24+00</p>



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Inspect ID: N21L_2019_r_0139 **Title:** USACE_CELRB_N21L_2019_r_0139_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Trees and vegetation in riprap on right bank from barrier levee weir to 500' upstream of barrier levee weir.; Action: Remove trees and vegetation from riprap.; Station_1: 0+00; Station_2: 0+00



Inspect ID: N21L_2019_r_0140 **Title:** USACE_CELRB_N21L_2019_r_0140_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Vegetation in riprap on right bank from 400' downstream of upstream limit weir to barrier levee weir.; Action: Remove vegetation from riprap.; Station_1: 4+00; Station_2: 0+00



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	<p>Inspect ID: N21L_2019_r_0144 Title: USACE_CELRB_N21L_2019_r_0144_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and vegetation in riprap on right bank from upstream limit weir to 300' upstream.; Action: Remove trees and vegetation from riprap.; Station_1: 0+00; Station_2: 0+00</p>



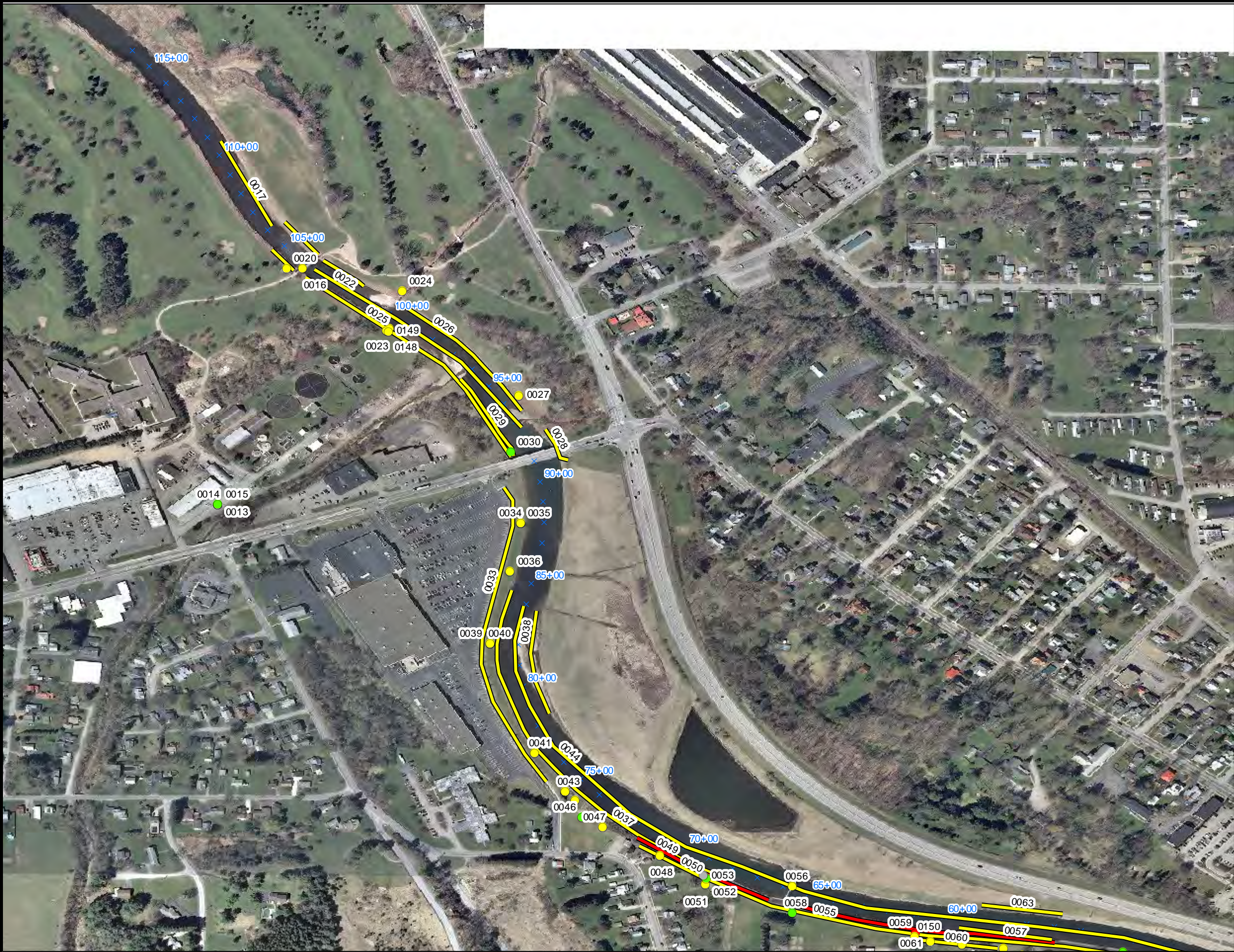
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Attachment “C” – Left Bank Levee and Channel: Levee
Inspection Map



Levee Inspection Map

Genesee River - Left Bank and Channel, Wellsville

Location: Wellsville, New York
Year/cycle: 2019 r
Inspection type: Routine
Inspected by:
Inspection date(s):
Observation ID prefix:
USACE_CELRB_N21L_2019_r
Map created: 20 November 2019

Observation Points

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

Observation Lines

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

0 510 1,020 Feet



Allegany New York

Potter Pennsylvania



Levee Inspection Map

Genesee River - Left Bank and Channel, Wellsville

Location: Wellsville, New York
Year/cycle: 2019 r
Inspection type: Routine
Inspected by:
Inspection date(s):
Observation ID prefix:
USACE_CELRB_N21L_2019_r
Map created: 20 November 2019

Observation Points

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

Observation Lines

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

0 510 1,020 Feet



Allegany New York



Potter Pennsylvania



Levee Inspection Map

Genesee River - Left Bank and Channel, Wellsville

Location: Wellsville, New York
Year/cycle: 2019 r
Inspection type: Routine
Inspected by:
Inspection date(s):
Observation ID prefix:
USACE_CELRB_N21L_2019_r
Map created: 20 November 2019

Observation Points

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

Observation Lines

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

0 510 1,020 Feet

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Allegany New York

Potter Pennsylvania

Attachment “D” – Left Bank Levee and Channel: Rehabilitation
Program Eligibility Determination Checklist

Attachment "D" – Rehabilitation Program Eligibility Determination Checklists - Left Bank and Channel

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Rehabilitation Program Eligibility Determination		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Public sponsor provided maintenance information per the Public Sponsor Pre-Inspection Form.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	Non-federal levee system meets Initial Eligibility criteria.
N/A <input checked="" type="checkbox"/>		
If either of the above items is marked "No" the levee system is not eligible.		
Rating	Rated Item	
Levee Embankments		
A <input type="checkbox"/>	M <input checked="" type="checkbox"/>	U <input type="checkbox"/>
		3. Encroachments
A <input type="checkbox"/>	U <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
		4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures)
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Slope Stability
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Erosion/ Bank Caving
A <input type="checkbox"/>	M <input checked="" type="checkbox"/>	U <input type="checkbox"/>
		10. Animal Control
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input checked="" type="checkbox"/>
		11. Culverts/Discharge Pipes (This item includes both concrete and corrugated metal pipes.)
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		14. Underseepage Relief Wells/Toe Drainage Systems
Floodwalls - Not Applicable		
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		2. Encroachments
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		3. Closure Structures (Stop Log Closures and Gates)
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Tilting, Sliding, or Settlement of Concrete Structures
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Foundation of Concrete Structures

Attachment "D" – Rehabilitation Program Eligibility Determination Checklists - Left Bank and Channel

A	<input type="checkbox"/>	8. Underseepage Relief Wells/Toe Drainage Systems
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
Interior Drainage System		
A	<input type="checkbox"/>	9. Culverts/Discharge Pipes
M	<input type="checkbox"/>	
U	<input checked="" type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input checked="" type="checkbox"/>	10. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input checked="" type="checkbox"/>	11. Flap Gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Pump Stations - Not Applicable		
A	<input type="checkbox"/>	17. Intake and Discharge Pipelines
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	18. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	19. Flap Gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Rehabilitation Program Status		
Active	<input checked="" type="checkbox"/>	System meets all interim eligibility criteria, including having received a rating of A, M, N/A or Yes for all subset items and is therefore eligible for rehabilitation assistance.
Inactive	<input type="checkbox"/>	System does not meet interim eligibility requirements.
<p>As a result of this FY19 routine inspection, the overall rating for this system is "UNACCEPTABLE" (U) primarily due to extensive vegetation, channel shoaling, and lack of pipe videotape inspections. Culverts/Discharge Pipes are rated "U" due to videotape inspections for all pipes not being conducted by the required time frame. Normally the project would be made "INACTIVE" in the USACE RP, however, since there are no other "U" levee system ratings, the sponsor is actively pursuing completion of the pipe inspections, and the conduits were rated either "A" or "M", USACE will allow an extension for this requirement until the date of the FY20 routine inspection. If videotape inspections are not completed by this time, the project will be made "INACTIVE" in the USACE Rehabilitation Program. With that said, this project is currently "ACTIVE" in the USACE RP.</p>		

Note: Item numbers listed above refer to their placement in the Flood Damage Reduction System Inspection Report. In order to be eligible, all of the following items must be rated A, M, N/A or Yes.

Attachment “E” – Right Bank Levee: Summary of Deficiencies
and Recommendations

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Genesee River - Right Bank, Wellsville

Inspect ID	Rating	Deficiency	Recommendations	Photo #	Category	Rated Item	Due Date
2	M	Unauthorized alteration (E-56): Chain link fence along right bank barrier levee within 15 feet of levee landside toe at ball field (approx. 130 feet long as measured from road).	Remove or submit Section 408 Alteration Request to USACE.	02_1.jpg	Levee Embankments	Encroachments	12/31/18 (FY16)
3	M	Unwanted vegetation on right bank barrier levee waterside slope and within 15' of riverside toe.	Remove unwanted vegetation.	03_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/17 (FY15)
4	M	Unauthorized alteration (E-57): Gray brick utility building and sidewalk within 15' of right bank barrier levee landside toe.	Submit Section 408 Alteration Request to USACE.	04_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)
5	M	Unauthorized alteration (E-59): Right bank barrier levee removed at east end.	Resolve unauthorized alteration (repair levee to As-Built conditions) or submit a Section 408 Alteration Request Form.	05_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)
6	M	Unauthorized alteration (E-58): Chain link fence and gate across right bank barrier levee.	Remove or submit Section 408 Alteration Request to USACE.	06_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)
7	M	Unauthorized alteration (E-60): Asphalt road through right bank barrier levee.	Submit Section 408 Alteration Request to USACE.	07_1.jpg	Levee Embankments	Encroachments	12/31/19 (FY17)
8	M	24" CMP at east end of right bank barrier levee is obstructed by sediment.	Clear obstructed outfall.		Interior Drainage System	Vegetation and Obstructions	12/31/17 (FY15)
9	M	Locked gate on right bank barrier levee - NYSDEC did not have keys during inspection.	NYSDEC should obtain keys to lock.	09_1.jpg	Levee Embankments	Encroachments	12/31/21 (FY19)



Attachment “F” – Right Bank Levee: Flood Damage Reduction
System Inspection Report



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Flood Damage Reduction Segment / System Inspection Report

Name of Segment / System: Genesee River - Right Bank, Wellsville

Public Sponsor(s): New York State Department of Environmental Conservation - Region 9

Public Sponsor Representative: Theodore Myers

Sponsor Phone: (716) 851-7070

Sponsor Email: theodore.myers@dec.ny.gov

Corps of Engineers Inspector: R. Remmers, J. Doktor, J. Rogers

Inspection Start Date: 9/23/2019

Inspection End Date: _____

Inspection Report Prepared By: James Rogers

Date Report Prepared: _____

Internal Technical Review (for Periodic Inspections) By: _____

Date of ITR: _____

Final Approved By: _____

Date Approved: _____

Type of Inspection:

- ☐ **Initial Eligibility Inspection**
☒ **Continuing Eligibility Inspection (Routine)**
☐ **Continuing Eligibility Inspection (Periodic)**

Overall Segment / System Rating:

- ☐ **Acceptable**
☒ **Minimally Acceptable**
☐ **Unacceptable**

Contents of Report:

- ☒ **Instructions**
☐ **Initial Eligibility Inspection**
☒ **General Items for All Flood Control Works**
☒ **Levee Embankment**
☐ **Concrete Floodwalls**
☐ **Sheet Pile and Concrete I-walls**
☒ **Interior Drainage System**
☐ **Pump Stations**
☐ **FDR System Channels**

Note: In addition to the report contents indicated here, a plan view drawing of the system, with stationing, should be included with this report to reference locations of items rated less than acceptable. Photos of general system condition and any noted deficiencies should also be attached.

Note: This inspection rating represents the Corps evaluation of operations and maintenance of the flood damage reduction system and may be used in conjunction with other information for a levee certification determination for National Flood Insurance Program (NFIP) purposes if applicable. An Acceptable Corps inspection rating, alone, does not equate to a certifiable levee for the NFIP. It is recommended for levee systems currently accredited by the Federal Emergency Management Agency (FEMA) for NFIP purposes receiving a Corps Minimally Acceptable or Unacceptable rating, be evaluated by the levee owner to determine the potential impacts to the certification for FEMA.



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Flood Damage Reduction Segment / System Public Sponsor Pre-Inspection Form

The following information is to be provided by the levee district sponsor prior to an inspection. This information will be used to help evaluate the organizational capability of the levee district to manage the levee segment / system maintenance program.

1. Levee segment / system and district: (name of the segment / system and levee district) Genesee River - Right Bank, Wellsville for CELRB
2. Reporting period: (month/day/year to month/day/year)
3. Summary of maintenance required by last inspection report:
4. Summary of maintenance performed this reporting period:
5. Summary of maintenance planned next reporting period:
6. Summary of changes to segment / system since last inspection:
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers:



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**Flood Damage Reduction Segment / System
Inspection Report
Genesee River - Right Bank, Wellsville**

**Pre-Inspection Form
Page 1 of 2**

Public Sponsor Pre-Inspection Report

The following information is to be provided by the levee district sponsor prior to an inspection

8. Levee district organization: (elected or appointed levee district officials and key employees)

Name	Position	Mailing Address	Phone Number	Email Address

General Instructions for the Inspection of Flood Damage Reduction Segments / Systems

A. Purpose of USACE Inspections:

The primary purpose of these inspections is to prevent loss of life and catastrophic damages; preserve the value of Federal investments, and to encourage non-Federal sponsors to bear responsibility for their own protection. Inspections should assure that Flood Damage Reduction structures and facilities are continually maintained and operated as necessary to obtain the maximum benefits. Inspections are also conducted to determine eligibility for Rehabilitation Assistance under authority of PL 84-99 for Federal and non-Federal systems. (ER 1130-2-530, ER 500-1-1)

B. Types of Inspections:

The Corps conducts several types of inspections of Flood Damage Reduction systems, as outlined below:

Initial Eligibility Inspections	Continuing Eligibility Inspections	
	Routine Inspections	Periodic Inspections
IEIs are conducted to determine whether a non-Federally constructed Flood Damage Reduction system meets the minimum criteria and standards set forth by the Corps for initial inclusion into the Rehabilitation and Inspection Program.	RIs are intended to verify proper maintenance, owner preparedness, and component operation.	PIs are intended to verify proper maintenance and component operation and to evaluate operational adequacy, structural stability, and safety of the system. Periodic Inspections evaluate the system's original design criteria vs. current design criteria to determine potential performance impacts, evaluate the current conditions, and compare the design loads and design analysis used against current design standards. This is to be done to identify components and features for the sponsor that need to be monitored more closely over time or corrected as needed. (Periodic Inspections are used as the basis of risk assessments.)

C. Inspection Boundaries:

Inspections should be conducted so as to rate each Flood Damage Reduction "Segment" of the system. The overall system rating will be the lowest segment rating in the system.

Project	System	Segment
A flood damage reduction project is made up of one or more flood damage reduction systems which were under the same authorization.	A flood damage reduction system is made up of one or more flood damage reduction segments which collectively provide flood damage reduction to a defined area. Failure of one segment within a system constitutes failure of the entire system. Failure of one system does not affect another system.	A flood damage reduction segment is defined as a discrete portion of a flood damage reduction system that is operated and maintained by a single entity. A flood damage reduction segment can be made up of one or more features (levee, floodwall, pump stations, etc).

D. Land Use Definitions:

The following three definitions are intended for use in determining minimum required inspection intervals and initial requirements for inclusion into the Rehabilitation and Inspection Program. Inspections should be considered for all systems that would result in significant environmental or economic impact upon failure regardless of specific land use.

Agricultural	Rural	Urban
Protected population in the range of zero to 5 households per square mile protected.	Protected population in the range of 6 to 20 households per square mile protected.	Greater than 20 households per square mile; major industrial areas with significant infrastructure investment. Some protected urban areas have no permanent population but may be industrial areas with high value infrastructure with no overnight population.

E. Use of the Inspection Report Template:

The report template is intended for use in all Army Corps of Engineers inspections of levee and floodwall systems and flood damage reduction channels. The section of the template labeled "Initial Eligibility" only needs to be completed during Initial Eligibility Inspections of Non-Federally constructed Flood Damage Reduction Systems. The section labeled "General Items" needs to be completed with every inspection, along with all other sections that correspond to features in the system. The section labeled "Public Sponsor Pre-Inspection Report" is intended for completion before the inspection, if possible.

F. Individual Item / Component Ratings:

Assessment of individual components rated during the inspection should be based on the criteria provided in the inspection report template, though inspectors may incorporate additional items into the report based on the characteristics of the system. The assessment of individual components should be based on the following definitions.

Acceptable Item	Minimally Acceptable Item	Unacceptable Item
The inspected item is in satisfactory condition, with no deficiencies, and will function as intended during the next flood event.	The inspected item has one or more minor deficiencies that need to be corrected. The minor deficiency or deficiencies will not seriously impair the functioning of the item as intended during the next flood event.	The inspected item has one or more serious deficiencies that need to be corrected. The serious deficiency or deficiencies will seriously impair the functioning of the item as intended during the next flood event.

G. Overall Segment / System Ratings:

Determination of the overall system rating is based on the definitions below. Note that an Unacceptable System Rating may be either based on an engineering determination that concluded that noted deficiencies would prevent the system from functioning as intended during the next flood event, or based on the sponsor's demonstrated lack of commitment or inability to correct serious deficiencies in a timely manner.

Acceptable System	Minimally Acceptable System	Unacceptable System
All items or components are rated as Acceptable.	One or more items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable items would not prevent the segment / system from performing as intended during the next flood event.	One or more items are rated as Unacceptable and would prevent the segment / system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

H. Eligibility for PL84-99 Rehabilitation Assistance:

Inspected systems that are not operated and maintained by the Federal government may be Active in the Corps' Rehabilitation and Inspection Program (RIP) and eligible for rehabilitation assistance from the Corps as defined below:

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
The system is active in the RIP and eligible for PL84-99 rehabilitation assistance.	The system is Active in the RIP during the time that it takes to make needed corrections. Active systems are eligible for rehabilitation assistance. However, if the sponsor does not present USACE with proof that serious deficiencies (which had previously resulted in a minimally acceptable system rating) were corrected within the established timeframe, then the system will become Inactive in the RIP.	The system is Inactive in the RIP, and the status will remain Inactive until the sponsor presents USACE with proof that all items rated Unacceptable have been corrected. Inactive systems are ineligible for rehabilitation assistance.

I. Reporting:

After the inspection, the Corps is responsible for assembling an inspection report (or a summary report if it was a Periodic Inspection) including the following information:

- a. All sections of the report template used during the inspection, including the cover and pre-inspection materials. (Supplemental data collected, and any sections of the template that weren't used during the inspection do not need to be included with the report.)
- b. Photos of the general system condition and noted deficiencies.
- c. A plan view drawing of the system, with stationing, to reference locations of items rated less than acceptable.
- d. The relative importance of the identified maintenance issues should be specified in the transmittal letter.
- e. If the Overall System Rating is Minimally Acceptable, the report needs to establish a timeframe for correction of serious deficiencies noted (not to exceed two years) and indicate that if these items are not corrected within the required timeframe, the system will be rated as Unacceptable and made Inactive in the Rehabilitation Inspection Program.

J. Notification:

Reports are to be disseminated as follows within 30 days of the inspection date.

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
Reports need to be provided to the local sponsor and the county emergency management agency.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, and to the FEMA region.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, FEMA region, and to the Congressional delegation within 30 days of the inspection.

General Items for All Flood Damage Reduction Segments / Systems

For use during all inspections of all Flood Damage Reduction Segments / Systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Operations and Maintenance Manuals	A	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	
		M	Sponsor manuals are lost or missing or out of date; however, sponsor will obtain manuals prior to next scheduled inspection.	
		U	Sponsor has not obtained lost or missing manuals identified during previous inspection.	
2. Emergency Supplies and Equipment (A or M only)	A	A	The sponsor maintains a stockpile of sandbags, shovels, and other flood fight supplies which will adequately supply all needs for the initial days of a flood fight. Sponsor determines required quantity of supplies after consulting with inspector.	
		M	The sponsor does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	
3. Flood Preparedness and Training (A or M only)	A	A	Sponsor has a written system-specific flood response plan and a solid understanding of how to operate, maintain, and staff the FDR system during a flood. Sponsor maintains a list of emergency contact information for appropriate personnel and other emergency response agencies.	
		M	The sponsor maintains a good working knowledge of flood response activities, but documentation of system-specific emergency procedures and emergency contact personnel is insufficient or out of date.	

Key: A = Acceptable. M = Minimally Acceptable; Maintenance is required. U = Unacceptable. N/A = Not Applicable. FDR = Flood Damage Reduction



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Flood Damage Reduction Segment / System
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Genesee River - Right Bank, Wellsville

General Items for All Flood Damage Reduction
Segments / Systems
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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Unwanted Vegetation Growth ¹	M	A	The levee has little or no unwanted vegetation (trees, bush, or undesirable weeds), except for vegetation that is properly contained and/or situated on overbuilt sections, such that the mandatory 3-foot root-free zone is preserved around the levee profile. The levee has been recently mowed. The vegetation-free zone extends 15 feet from both the landside and riverside toes of the levee to the centerline of the tree. If the levee access easement doesn't extend to the described limits, then the vegetation-free zone must be maintained to the easement limits. Reference EM 1110-2-301 or Corps policy for regional vegetation variance.	N21R_2019_r_0003: Station_1 NA: Station_2 NA: Unwanted vegetation on right bank barrier levee waterside slope and within 15' of riverside toe.: Remove unwanted vegetation. (M)
		M	Minimal vegetation growth (brush, weeds, or trees 2 inches in diameter or smaller) is present within the zones described above. This vegetation must be removed but does not currently threaten the operation or integrity of the levee.	
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above and must be removed to reestablish or ascertain levee integrity.	
2. Sod Cover	A	A	There is good coverage of sod over the levee.	
		M	Approximately 25% of the sod cover is missing or damaged over a significant portion or over significant portions of the levee embankment. This may be the result of over-grazing or feeding on the levee, unauthorized vehicular traffic, chemical or insect problems, or burning during inappropriate seasons.	
		U	Over 50% of the sod cover is missing or damaged over a significant portion or portions of the levee embankment.	
		N/A	Surface protection is provided by other means.	
3. Encroachments	M	A	No trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the levee.	N21R_2019_r_0002: Station_1 NA: Station_2 NA: Unauthorized alteration (E-56): Chain link fence along right bank barrier levee within 15 feet of levee landside toe at ball field (approx. 130 feet long as measured from road).: Remove or submit Section 408 Alteration Request to USACE. (M) N21R_2019_r_0004: Station_1 NA: Unauthorized alteration (E-57): Gray brick utility building and sidewalk within 15' of right bank barrier levee landside toe.: Submit Section 408 Alteration Request to USACE. (M) N21R_2019_r_0005: Station_1 NA: Unauthorized alteration (E-59): Right bank barrier levee removed at east end.: Resolve unauthorized alteration (repair levee to As-Built conditions) or submit a Section 408 Alteration Request Form. (M) N21R_2019_r_0006: Station_1 NA: Station_2 NA: Unauthorized alteration (E-58): Chain link fence and gate across right bank barrier levee.: Remove or submit Section
		M	Trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the levee.	

Key: A = Acceptable. M = Minimally Acceptable; Maintenance is required. U = Unacceptable. N/A = Not Applicable. FDR = Flood Damage Reduction



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Flood Damage Reduction Segment / System
Inspection Report
Genesee River - Right Bank, Wellsville

Levee Embankments
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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				408 Alteration Request to USACE. (M) N21R_2019_r_0007: Station_1 NA: Unauthorized alteration (E-60): Asphalt road through right bank barrier levee.: Submit Section 408 Alteration Request to USACE. (M) N21R_2019_r_0009: Station_1 NA: Locked gate on right bank barrier levee - NYSDEC did not have keys during inspection.: NYSDEC should obtain keys to lock. (M)
4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures) (A or U only)	NA	A	Closure structure in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components are clearly marked and installation instructions/ procedures readily available. Trial erections have been accomplished in accordance with the O&M Manual.	
		U	Any of the following issues is cause for this rating: Closure structure in poor condition. Parts missing or corroded. Placing equipment may not be available within the anticipated warning time. The storage vaults cannot be opened during the time of inspection. Components of closure are not clearly marked and installation instructions/ procedures are not readily available. Trial erections have not been accomplished in accordance with the O&M Manual.	
		N/A	There are no closure structures along this component of the FDR segment / system.	
5. Slope Stability	A	A	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	N21R_2019_r_0001: Station_1 NA: Right bank levee at barrier levee.: NA (A)
		M	Minor slope stability problems that do not pose an immediate threat to the levee embankment.	
		U	Major slope stability problems (ex. deep seated sliding) identified that must be repaired to reestablish the integrity of the levee embankment.	
6. Erosion/ Bank Caving	A	A	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	
		M	There are areas where minor erosion is occurring or has occurred on or near the levee embankment, but levee integrity is not threatened.	
		U	Erosion or caving is occurring or has occurred that threatens the stability and integrity of the levee. The erosion or caving has progressed into the levee section or into the extended footprint of the levee foundation and has compromised the levee foundation stability.	
7. Settlement ²	A	A	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	
		M	Minor irregularities that do not threaten integrity of levee. Records are incomplete or inclusive.	
		U	Obvious variations in elevation over significant reaches. No records exist or records indicate that design elevation is compromised.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
8. Depressions/ Rutting	A	A	There are scattered, shallow ruts, pot holes, or other depressions on the levee that are unrelated to levee settlement. The levee crown, embankments, and access road crowns are well established and drain properly without any ponded water.	
		M	There are some infrequent minor depressions less than 6 inches deep in the levee crown, embankment, or access roads that will pond water.	
		U	There are depressions greater than 6 inches deep that will pond water.	
9. Cracking	A	A	Minor longitudinal, transverse, or desiccation cracks with no vertical movement along the crack. No cracks extend continuously through the levee crest.	
		M	Longitudinal and/or transverse cracks up to 6 inches in depth with no vertical movement along the crack. No cracks extend continuously through the levee crest. Longitudinal cracks are no longer than the height of the levee.	
		U	Cracks exceed 6 inches in depth. Longitudinal cracks are longer than the height of the levee and/or exhibit vertical movement along the crack. Transverse cracks extend through the entire levee width.	
10. Animal Control	A	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	
		M	The existing animal burrow control program needs to be improved. Several burrows are present which may lead to seepage or slope stability problems, and they require immediate attention.	
		U	Animal burrow control program is not effective or is nonexistent. Significant maintenance is required to fill existing burrows, and the levee will not provide reliable flood protection until this maintenance is complete.	
11. Culverts/ Discharge Pipes ³ (This item includes both concrete and corrugated metal pipes.)	NA	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	

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		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
12. Riprap Revetments & Bank Protection	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
13. Revetments other than Riprap	NA	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	
		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		N/A	There are no such revetments protecting this feature of the segment / system.	
14. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining FDR segment / system stability during high water functioned properly during the last flood event and no sediment is observed in horizontal system (if applicable). Nothing is observed which would indicate that the drainage systems won't function properly during the next flood, and maintenance records indicate regular cleaning. Wells have been pumped tested within the past 5 years and documentation is provided.	
		M	Toe drainage systems or pressure relief wells are damaged and may become clogged if they are not repaired. Maintenance records are incomplete or indicate irregular cleaning and pump testing.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
15. Seepage	A	U	Toe drainage systems or pressure relief wells necessary for maintaining FDR segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		N/A	There are no relief wells/ toe drainage systems along this component of the FDR segment / system.	
		A	No evidence or history of unrepaired seepage, saturated areas, or boils.	
		M	Evidence or history of minor unrepaired seepage or small saturated areas at or beyond the landside toe but not on the landward slope of levee. No evidence of soil transport.	
		U	Evidence or history of active seepage, extensive saturated areas, or boils.	

¹ If there is significant growth on the levee that inhibits the inspection of animal burrows or other items, the inspection should be ended until this item is corrected.

² Detailed survey elevations are normally required during Periodic Inspections, and whenever there are obvious visual settlements.

³ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

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	<p>Inspect ID: N21R_2019_r_0003 Title: USACE_CELRB_N21R_2019_r_0003_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Minimally Acceptable; Remarks: Unwanted vegetation on right bank barrier levee waterside slope and within 15' of riverside toe.; Action: Remove unwanted vegetation.; Station_1: NA; Station_2: NA</p>
	<p>Inspect ID: N21R_2019_r_0002 Title: USACE_CELRB_N21R_2019_r_0002_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-56): Chain link fence along right bank barrier levee within 15 feet of levee landside toe at ball field (approx. 130 feet long as measured from road).; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: NA; Station_2: NA</p>



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	<p>Inspect ID: N21R_2019_r_0004 Title: USACE_CELRB_N21R_2019_r_0004_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-57): Gray brick utility building and sidewalk within 15' of right bank barrier levee landside toe.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: NA</p>
	<p>Inspect ID: N21R_2019_r_0005 Title: USACE_CELRB_N21R_2019_r_0005_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-59): Right bank barrier levee removed at east end.; Action: Resolve unauthorized alteration (repair levee to As-Built conditions) or submit a Section 408 Alteration Request Form.; Station_1: NA</p>



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	<p>Inspect ID: N21R_2019_r_0006 Title: USACE_CELRB_N21R_2019_r_0006_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-58): Chain link fence and gate across right bank barrier levee.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: NA; Station_2: NA</p>
	<p>Inspect ID: N21R_2019_r_0007 Title: USACE_CELRB_N21R_2019_r_0007_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-60): Asphalt road through right bank barrier levee.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: NA</p>



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	<p>Inspect ID: N21R_2019_r_0009 Title: USACE_CELRB_N21R_2019_r_0009_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Locked gate on right bank barrier levee - NYSDEC did not have keys during inspection.; Action: NYSDEC should obtain keys to lock.; Station_1: NA</p>



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Interior Drainage System

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	M	A	No obstructions, vegetation, debris, or sediment accumulation noted within interior drainage channels or blocking the culverts, inlets, or discharge areas. Concrete joints and weep holes are free of grass and weeds.	N21R_2019_r_0008: Station_1 NA: 24" CMP at east end of right bank barrier levee is obstructed by sediment.: Clear obstructed outfall. (M)
		M	Obstructions, vegetation, debris, or sediment are minor and have not impaired channel flow capacity or blocked more than 10% of any culvert openings, but should be removed. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	
		U	Obstructions, vegetation, debris, or sediment have impaired the channel flow capacity or blocked more than 10% of a culvert opening. Sediment and debris removal required to re-establish flow capacity.	
2. Encroachments	A	A	No trash, debris, unauthorized structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the interior drainage system.	
		M	Trash, debris, unauthorized structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of this component of the interior drainage system.	
3. Ponding Areas	NA	A	No trash, debris, structures, or other obstructions present within the ponding areas. Sediment deposits do not exceed 10% of capacity.	
		M	Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit operations and maintenance. Sediment deposits do not exceed 30% of capacity.	
		U	Trash, debris, excavations, structures, or other obstructions, or other encroachments or activities noted that will inhibit operations, maintenance, or emergency work. Sediment deposits exceeds 30% of capacity.	
		N/A	There are no ponding areas associated with the interior drainage system.	
4. Fencing and Gates ¹	NA	A	Fencing is in good condition and provides protection against falling or unauthorized access. Gates open and close freely, locks are in place, and there is little corrosion on metal parts.	
		M	Fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	
		U	Fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous features are not secured.	
		N/A	There are no features noted that require safety fencing.	
5. Concrete Surfaces (Such as gate)	NA	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
wells, outfalls, intakes, or culverts)		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
6. Tilting, Sliding or Settlement of Concrete and Sheet Pile Structures ² (Such as gate wells, outfalls, intakes, or culverts)	NA	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
7. Foundation of Concrete Structures ³ (Such as culverts, inlet and discharge structures, or gatewells.)	NA	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. The rate of erosion is such that the structure is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that may lead to structural instabilities before the next inspection.	
		N/A	There are no concrete items in the interior drainage system.	
8. Monolith Joints	NA	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/ desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no monolith joints in the interior drainage system.	
9. Culverts/ Discharge Pipes ⁴	M	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
10. Sluice / Slide Gates ⁵	NA	A	Gates open and close freely to a tight seal or minor leakage. Gate operators are in good working condition and are properly maintained. Sill is free of sediment and other obstructions. Gates and lifters have been maintained and are free of corrosion. Documentation provided during the inspection.	
		M	Gates and/or operators have been damaged or have minor corrosion, and open and close with resistance or binding. Leakage quantity is controllable, but maintenance is required. Sill is free of sediment and other obstructions.	
		U	Gates do not open or close and/or operators do not function. Gate, stem, lifter and/or guides may be damaged or have major corrosion.	
		N/A	There are no sluice/ slide gates.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
11. Flap Gates/ Flap Valves/ Pinch Valves ¹	NA	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	
12. Trash Racks (non-mechanical)	NA	A	Trash racks are fastened in place and properly maintained.	
		M	Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station, bars are corroded to the point that up to 10% of the sectional area may be lost. Repair or replacement is required.	
		U	Trash racks are missing or damaged to the extent that they are no longer functional and must be replaced. (For example, more than 10% of the sectional area may be lost.)	
		N/A	There are no trash racks, or they are covered in the pump stations section of the report.	
13. Other Metallic Items	NA	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	
		M	Corrosion seen on metallic parts appears to be maintainable.	
		U	Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	
		N/A	There are no other significant metallic items.	
14. Riprap Revetments of Inlet/ Discharge Areas	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
15. Revetments other than Riprap	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

¹ Proper operation of this item must be demonstrated during the inspection.

² The sponsor should be monitoring any observed movement to verify whether the movement is active or inactive.

³ Inspectors must have as-built drawings available during the inspection so that the lateral distance to the heel and toe of the floodwalls can be determined in the field.

⁴ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

⁵ Proper operation of the gates (full open and closed) must be demonstrated during the inspection if no documentation is available. Be aware of both manual and electrical operators.

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Attachment “G” – Right Bank Levee: Levee Inspection Map



Levee Inspection Map

Genesee River - Right Bank, Wellsville

Location: Wellsville, New York
Year/cycle: 2019 r
Inspection type: Routine
Inspected by:
Inspection date(s):
Observation ID prefix:
USACE_CELRB_N21R_2019_r
Map created: 21 November 2019

Observation Points

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

Observation Lines

- Acceptable
- Minimally Acceptable
- Unacceptable
- Not Applicable

0 140 280 Feet

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Allegany New York

Potter Pennsylvania

Attachment “H” – Right Bank Levee: Rehabilitation Program
Eligibility Determination Checklist

Attachment "H" – Rehabilitation Program Eligibility Determination Checklists - Right Bank

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Rehabilitation Program Eligibility Determination		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Public sponsor provided maintenance information per the Public Sponsor Pre-Inspection Form.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	Non-federal levee system meets Initial Eligibility criteria.
N/A <input checked="" type="checkbox"/>		
If either of the above items is marked "No" the levee system is not eligible.		
Rating	Rated Item	
Levee Embankments		
A <input type="checkbox"/>	M <input checked="" type="checkbox"/>	U <input type="checkbox"/>
		3. Encroachments
A <input type="checkbox"/>	U <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
		4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures)
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Slope Stability
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Erosion/ Bank Caving
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		10. Animal Control
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		11. Culverts/Discharge Pipes (This item includes both concrete and corrugated metal pipes.)
A <input type="checkbox"/>	M <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
		14. Underseepage Relief Wells/Toe Drainage Systems
Floodwalls - Not Applicable		
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		2. Encroachments
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		3. Closure Structures (Stop Log Closures and Gates)
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Tilting, Sliding, or Settlement of Concrete Structures
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Foundation of Concrete Structures

Attachment "H" – Rehabilitation Program Eligibility Determination Checklists - Right Bank

A	<input type="checkbox"/>	
M	<input type="checkbox"/>	8. Underseepage Relief Wells/Toe Drainage Systems
U	<input type="checkbox"/>	
Interior Drainage System		
A	<input type="checkbox"/>	
M	<input checked="" type="checkbox"/>	9. Culverts/Discharge Pipes
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	
M	<input type="checkbox"/>	10. Sluice/Slide Gates
U	<input type="checkbox"/>	
N/A	<input checked="" type="checkbox"/>	
A	<input type="checkbox"/>	
M	<input type="checkbox"/>	11. Flap Gates/Flap Valves/Pinch Valves
U	<input type="checkbox"/>	
N/A	<input checked="" type="checkbox"/>	
Pump Stations - Not Applicable		
A	<input type="checkbox"/>	
M	<input type="checkbox"/>	17. Intake and Discharge Pipelines
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	
M	<input type="checkbox"/>	18. Sluice/Slide Gates
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	
M	<input type="checkbox"/>	19. Flap Gates/Flap Valves/Pinch Valves
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Rehabilitation Program Status		
Active	<input checked="" type="checkbox"/>	System meets all interim eligibility criteria, including having received a rating of A, M, N/A or Yes for all subset items and is therefore eligible for rehabilitation assistance.
Inactive	<input type="checkbox"/>	System does not meet interim eligibility requirements.
As a result of this FY19 routine inspection, the overall rating for this levee system is "MINIMALLY ACCEPTABLE" (M) and it is "ACTIVE" in the Rehabilitation Program.		

Note: Item numbers listed above refer to their placement in the Flood Damage Reduction System Inspection Report. In order to be eligible, all of the following items must be rated A, M, N/A or Yes.

Attachment “I” – Dyke Creek Levee: Summary of Deficiencies
and Recommendations

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Dyke Creek - Left Bank and Channel, Wellsville

Inspect ID	Rating	Deficiency	Recommendations	Photo #	Category	Rated Item	Due Date
1	M	Unauthorized alteration (E-49): levee overbuild added on to USACE levee at upstream limit by Soil Conservation Service to levee upstream limit. (Dyke Creek).	Submit Section 408 Alteration Request to USACE.	01_1.jpg	Levee Embankments	Encroachments	12/31/17 (FY15)
2	U	Trees on left bank levee landside slope 700' upstream of Drop Structure. (Dyke Creek)	Remove trees.	02_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/17 (FY15)
3	U	Trees and unwanted vegetation in riprap on left bank waterside slope from upstream limit of Dyke Creek to 300' downstream of the Drop Structure. (Dyke Creek).	Remove trees and unwanted vegetation.	03_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)
4	M	Log debris in channel on right bank shoal 500' upstream of drop structure. (Dyke Creek)	Remove debris.	04_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)
5	M	Shoaling (S-14) on right bank from 200' upstream of drop structure to upstream project limit. (Dyke Creek).	Remove shoaling.	05_1.jpg 05_2.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)
6	U	Vegetation in excess of 12" on right bank levee crown from drop structure to 400' upstream.	Remove brush and mow vegetation to 3"-6" height.	06_1.jpg	Levee Embankments	Unwanted Vegetation Growth	12/31/19 (FY17)
8	M	Tree debris on levee waterside slope, 550' downstream from upstream limit of Dyke Creek.	Remove tree debris.	08_1.jpg	Levee Embankments	Encroachments	12/31/21 (FY19)
9	M	Unauthorized alteration (E-50): Concrete blocks, guardrail, utility pole, guy wire, and dead end sign encroachments on left bank at end of Miller Street just upstream of drop structure. (Dyke Creek)	Remove or submit Section 408 Alteration Request to USACE.	09_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)
10	U	Trees and vegetation in riprap on right bank upstream of Dyke Creek drop structure.	Remove vegetation and trees.	10_1.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/18 (FY16)
12	M	Fallen tree on drop structure.	Remove fallen tree from drop structure.	12_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)
13	M	Erosion on left bank channel sideslope just downstream of drop structure.	Repair erosion.	13_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/19 (FY17)
15	M	Vegetated shoal (S-15) in center of channel 100' downstream of Dyke Creek drop structure to 200' downstream of drop structure.	Remove shoal.	15_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)
16	U	Trees and vegetation in riprap on right bank from Broad Street bridge to Dyke Creek drop structure.	Remove unwanted vegetation.	16_1.jpg 16_2.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)
17	M	Unauthorized alteration (E-50a): 18" CMP encroachment on left bank, at Loring Ave.	Remove or submit Section 408 Alteration Request to USACE.	17_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/20 (FY18)
18	M	Shoaling (S-16) on left bank and in center of channel from Dyke Creek drop structure to Broadway Street Bridge.	Remove shoal.	18_1.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)
19	M	Vegetation in excess of 12" on left bank from Broad Street bridge to Dyke Creek drop structure.	Mow vegetation to 3"-6" height.	19_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/17 (FY15)
20	U	Trees and vegetation on left bank channel side slope from Broad Street bridge to 125' upstream.	Remove trees and vegetation.	20_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)
21	M	Tree debris in channel on pier of Broad Street bridge. (Dyke Creek)	Remove tree debris.	21_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)
22	U	Significant vegetation and trees in riprap on both banks between Railroad bridge and Broad Street bridge. (Dyke Creek)	Remove trees and vegetation from riprap.	22_1.jpg 22_2.jpg 22_3.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)



SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Project: Dyke Creek - Left Bank and Channel, Wellsville

23	M	Unauthorized alteration (E-51): wood stairs on left bank channel slope just downstream of railroad bridge.	Submit Section 408 Alteration Request to USACE.	23_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)
25	M	Unauthorized alteration (E-52): wooden stairs and railing encroachments on left bank channel slope just downstream of railroad bridge.	Remove or submit Section 408 Alteration Request to USACE.	25_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)
27	M	Erosion on left bank channel sideslope 175' upstream of Main Street Bridge, caused by parking lot drainage.	Repair erosion and mitigate parking lot drainage.	27_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/19 (FY17)
29	M	Unauthorized alteration (E-53): wood stairs left bank channel slope.	Remove or submit Section 408 Alteration Request to USACE.	29_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/18 (FY16)
30	M	Erosion on left bank upstream of Main Street.	Repair erosion.	30_1.jpg	Flood Damage Reduction Channels	Erosion	12/31/18 (FY16)
31	M	Unauthorized alteration (E-53a): 24" CMP outfall on left bank channel sideslope, 50' upstream of Main Street bridge.	Remove or submit Section 408 Alteration Request to USACE.		Flood Damage Reduction Channels	Encroachments	12/31/19 (FY17)
32	U	Trees and significant vegetation in riprap on both banks between Main Street Bridge and Railroad Bridge.	Remove trees and vegetation from riprap.	32_1.jpg 32_2.jpg 32_3.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)
33	U	Significant trees and vegetation in riprap on both banks just 100' of bridgedownstream of Main Street bridge.	Remove trees and vegetation from riprap.	33_1.jpg 33_2.jpg	Flood Damage Reduction Channels	Riprap Revetments & Banks	12/31/17 (FY15)
34	M	Vegetation in excess of 12" on tops both banks of channel from State Route 417 Bridge to Main Street Bridge.	Mow vegetation to 3"-6" height.	34_1.jpg 34_2.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)
35	U	Vegetated shoals (S-17) on concrete side slopes on both banks and in channel from State Route 417 Bridge to Main Street Bridge.	Remove vegetated shoal from concrete side slopes.	35_1.jpg 35_2.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)
36	M	Vegetation growing within left and right bank concrete channel side slopes from Main Street Bridge to State Route 417 Bridge.	Remove vegetation from concrete channel side slopes.	36_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/19 (FY17)
38	M	Tree debris in channel on pier of State Route 417 Bridge.	Remove tree debris.	38_1.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/20 (FY18)
39	M	Unauthorized alteration (E-55): Heating, electrical, and plumbing yard on Dyke Creek left bank just upstream of State Route 417 Bridge.	Remove or submit Section 408 Alteration Request to USACE.	39_1.jpg	Flood Damage Reduction Channels	Encroachments	12/31/17 (FY15)
40	M	Vegetation growing within left and right bank concrete channel side slopes from State Route 417 Bridge to the onvergence of Dyke Creek.	Remove vegetation from concrete channel side slopes.	40_1.jpg 40_2.jpg	Flood Damage Reduction Channels	Vegetation and Obstructions	12/31/19 (FY17)
41	U	Vegetated shoaling (S-18) on both banks from convergence of Dyke Creek to the State Route 417 Bridge.	Remove shoaling.	41_1.jpg 41_2.jpg	Flood Damage Reduction Channels	Shoaling (sediment deposition)	12/31/17 (FY15)
51	U	24" storm sewer under Dyke Creek levee, at downstream end of levee. Unacceptable pipe based on the lack of pipe videotape inspection.	Perform pipe videotape inspection and submit pipe assessment to USACE.		Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	Immediately
53	M	10" water main under levee not videotape inspected.	Pipe is under constant use and can not be videotaped. Verify pipe condition using other means.		Levee Embankments	Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.)	NA

Attachment “J” – Dyke Creek Levee: Flood Damage Reduction
System Inspection Report



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Flood Damage Reduction Segment / System Inspection Report

Name of Segment / System: Dyke Creek - Left Bank and Channel, Wellsville

Public Sponsor(s): New York State Department of Environmental Conservation - Region 9

Public Sponsor Representative: Theodore Myers

Sponsor Phone: (716) 851-7070

Sponsor Email: theodore.myers@dec.ny.gov

Corps of Engineers Inspector: R. Remmers, J. Doktor, J. Rogers Inspection Start Date: 9/23/2019

Inspection Report Prepared By: James Rogers Inspection End Date: _____

Internal Technical Review (for Periodic Inspections) By: _____ Date Report Prepared: _____

Final Approved By: _____ Date of ITR: _____

_____ Date Approved: _____

Type of Inspection:	<input type="checkbox"/> Initial Eligibility Inspection <input checked="" type="checkbox"/> Continuing Eligibility Inspection (Routine) <input type="checkbox"/> Continuing Eligibility Inspection (Periodic)	Overall Segment / System Rating:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Minimally Acceptable <input checked="" type="checkbox"/> Unacceptable
Contents of Report:	<input checked="" type="checkbox"/> Instructions <input type="checkbox"/> Initial Eligibility Inspection <input checked="" type="checkbox"/> General Items for All Flood Control Works <input checked="" type="checkbox"/> Levee Embankment <input type="checkbox"/> Concrete Floodwalls <input type="checkbox"/> Sheet Pile and Concrete I-walls <input checked="" type="checkbox"/> Interior Drainage System <input type="checkbox"/> Pump Stations <input checked="" type="checkbox"/> FDR System Channels	<p>Note: In addition to the report contents indicated here, a plan view drawing of the system, with stationing, should be included with this report to reference locations of items rated less than acceptable. Photos of general system condition and any noted deficiencies should also be attached.</p> <p>Note: This inspection rating represents the Corps evaluation of operations and maintenance of the flood damage reduction system and may be used in conjunction with other information for a levee certification determination for National Flood Insurance Program (NFIP) purposes if applicable. An Acceptable Corps inspection rating, alone, does not equate to a certifiable levee for the NFIP. It is recommended for levee systems currently accredited by the Federal Emergency Management Agency (FEMA) for NFIP purposes receiving a Corps Minimally Acceptable or Unacceptable rating, be evaluated by the levee owner to determine the potential impacts to the certification for FEMA.</p>	



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Flood Damage Reduction Segment / System Public Sponsor Pre-Inspection Form

The following information is to be provided by the levee district sponsor prior to an inspection. This information will be used to help evaluate the organizational capability of the levee district to manage the levee segment / system maintenance program.

1. Levee segment / system and district: (name of the segment / system and levee district) Dyke Creek - Left Bank and Channel, Wellsville for CELRB
2. Reporting period: (month/day/year to month/day/year)
3. Summary of maintenance required by last inspection report:
4. Summary of maintenance performed this reporting period:
5. Summary of maintenance planned next reporting period:
6. Summary of changes to segment / system since last inspection:
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers:



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**Flood Damage Reduction Segment / System
Inspection Report
Dyke Creek - Left Bank and Channel,**

**Pre-Inspection Form
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Public Sponsor Pre-Inspection Report

The following information is to be provided by the levee district sponsor prior to an inspection

8. Levee district organization: (elected or appointed levee district officials and key employees)

Name	Position	Mailing Address	Phone Number	Email Address



General Instructions for the Inspection of Flood Damage Reduction Segments / Systems

A. Purpose of USACE Inspections:

The primary purpose of these inspections is to prevent loss of life and catastrophic damages; preserve the value of Federal investments, and to encourage non-Federal sponsors to bear responsibility for their own protection. Inspections should assure that Flood Damage Reduction structures and facilities are continually maintained and operated as necessary to obtain the maximum benefits. Inspections are also conducted to determine eligibility for Rehabilitation Assistance under authority of PL 84-99 for Federal and non-Federal systems. (ER 1130-2-530, ER 500-1-1)

B. Types of Inspections:

The Corps conducts several types of inspections of Flood Damage Reduction systems, as outlined below:

Initial Eligibility Inspections	Continuing Eligibility Inspections	
	Routine Inspections	Periodic Inspections
IEIs are conducted to determine whether a non-Federally constructed Flood Damage Reduction system meets the minimum criteria and standards set forth by the Corps for initial inclusion into the Rehabilitation and Inspection Program.	RIs are intended to verify proper maintenance, owner preparedness, and component operation.	PIs are intended to verify proper maintenance and component operation and to evaluate operational adequacy, structural stability, and safety of the system. Periodic Inspections evaluate the system's original design criteria vs. current design criteria to determine potential performance impacts, evaluate the current conditions, and compare the design loads and design analysis used against current design standards. This is to be done to identify components and features for the sponsor that need to be monitored more closely over time or corrected as needed. (Periodic Inspections are used as the basis of risk assessments.)

C. Inspection Boundaries:

Inspections should be conducted so as to rate each Flood Damage Reduction "Segment" of the system. The overall system rating will be the lowest segment rating in the system.

Project	System	Segment
A flood damage reduction project is made up of one or more flood damage reduction systems which were under the same authorization.	A flood damage reduction system is made up of one or more flood damage reduction segments which collectively provide flood damage reduction to a defined area. Failure of one segment within a system constitutes failure of the entire system. Failure of one system does not affect another system.	A flood damage reduction segment is defined as a discrete portion of a flood damage reduction system that is operated and maintained by a single entity. A flood damage reduction segment can be made up of one or more features (levee, floodwall, pump stations, etc).

D. Land Use Definitions:

The following three definitions are intended for use in determining minimum required inspection intervals and initial requirements for inclusion into the Rehabilitation and Inspection Program. Inspections should be considered for all systems that would result in significant environmental or economic impact upon failure regardless of specific land use.

Agricultural	Rural	Urban
Protected population in the range of zero to 5 households per square mile protected.	Protected population in the range of 6 to 20 households per square mile protected.	Greater than 20 households per square mile; major industrial areas with significant infrastructure investment. Some protected urban areas have no permanent population but may be industrial areas with high value infrastructure with no overnight population.

E. Use of the Inspection Report Template:

The report template is intended for use in all Army Corps of Engineers inspections of levee and floodwall systems and flood damage reduction channels. The section of the template labeled "Initial Eligibility" only needs to be completed during Initial Eligibility Inspections of Non-Federally constructed Flood Damage Reduction Systems. The section labeled "General Items" needs to be completed with every inspection, along with all other sections that correspond to features in the system. The section labeled "Public Sponsor Pre-Inspection Report" is intended for completion before the inspection, if possible.

F. Individual Item / Component Ratings:

Assessment of individual components rated during the inspection should be based on the criteria provided in the inspection report template, though inspectors may incorporate additional items into the report based on the characteristics of the system. The assessment of individual components should be based on the following definitions.

Acceptable Item	Minimally Acceptable Item	Unacceptable Item
The inspected item is in satisfactory condition, with no deficiencies, and will function as intended during the next flood event.	The inspected item has one or more minor deficiencies that need to be corrected. The minor deficiency or deficiencies will not seriously impair the functioning of the item as intended during the next flood event.	The inspected item has one or more serious deficiencies that need to be corrected. The serious deficiency or deficiencies will seriously impair the functioning of the item as intended during the next flood event.

G. Overall Segment / System Ratings:

Determination of the overall system rating is based on the definitions below. Note that an Unacceptable System Rating may be either based on an engineering determination that concluded that noted deficiencies would prevent the system from functioning as intended during the next flood event, or based on the sponsor's demonstrated lack of commitment or inability to correct serious deficiencies in a timely manner.

Acceptable System	Minimally Acceptable System	Unacceptable System
All items or components are rated as Acceptable.	One or more items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable items would not prevent the segment / system from performing as intended during the next flood event.	One or more items are rated as Unacceptable and would prevent the segment / system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

H. Eligibility for PL84-99 Rehabilitation Assistance:

Inspected systems that are not operated and maintained by the Federal government may be Active in the Corps' Rehabilitation and Inspection Program (RIP) and eligible for rehabilitation assistance from the Corps as defined below:

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
The system is active in the RIP and eligible for PL84-99 rehabilitation assistance.	The system is Active in the RIP during the time that it takes to make needed corrections. Active systems are eligible for rehabilitation assistance. However, if the sponsor does not present USACE with proof that serious deficiencies (which had previously resulted in a minimally acceptable system rating) were corrected within the established timeframe, then the system will become Inactive in the RIP.	The system is Inactive in the RIP, and the status will remain Inactive until the sponsor presents USACE with proof that all items rated Unacceptable have been corrected. Inactive systems are ineligible for rehabilitation assistance.

I. Reporting:

After the inspection, the Corps is responsible for assembling an inspection report (or a summary report if it was a Periodic Inspection) including the following information:

- a. All sections of the report template used during the inspection, including the cover and pre-inspection materials. (Supplemental data collected, and any sections of the template that weren't used during the inspection do not need to be included with the report.)
- b. Photos of the general system condition and noted deficiencies.
- c. A plan view drawing of the system, with stationing, to reference locations of items rated less than acceptable.
- d. The relative importance of the identified maintenance issues should be specified in the transmittal letter.
- e. If the Overall System Rating is Minimally Acceptable, the report needs to establish a timeframe for correction of serious deficiencies noted (not to exceed two years) and indicate that if these items are not corrected within the required timeframe, the system will be rated as Unacceptable and made Inactive in the Rehabilitation Inspection Program.

J. Notification:

Reports are to be disseminated as follows within 30 days of the inspection date.

If the Overall System Rating is Acceptable	If the Overall System Rating is Minimally Acceptable	If the Overall System Rating is Unacceptable
Reports need to be provided to the local sponsor and the county emergency management agency.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, and to the FEMA region.	Reports need to be provided to the local sponsor, state emergency management agency, county emergency management agency, FEMA region, and to the Congressional delegation within 30 days of the inspection.

General Items for All Flood Damage Reduction Segments / Systems

For use during all inspections of all Flood Damage Reduction Segments / Systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Operations and Maintenance Manuals	A	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	
		M	Sponsor manuals are lost or missing or out of date; however, sponsor will obtain manuals prior to next scheduled inspection.	
		U	Sponsor has not obtained lost or missing manuals identified during previous inspection.	
2. Emergency Supplies and Equipment (A or M only)	A	A	The sponsor maintains a stockpile of sandbags, shovels, and other flood fight supplies which will adequately supply all needs for the initial days of a flood fight. Sponsor determines required quantity of supplies after consulting with inspector.	
		M	The sponsor does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	
3. Flood Preparedness and Training (A or M only)	A	A	Sponsor has a written system-specific flood response plan and a solid understanding of how to operate, maintain, and staff the FDR system during a flood. Sponsor maintains a list of emergency contact information for appropriate personnel and other emergency response agencies.	
		M	The sponsor maintains a good working knowledge of flood response activities, but documentation of system-specific emergency procedures and emergency contact personnel is insufficient or out of date.	

Key: A = Acceptable. M = Minimally Acceptable; Maintenance is required. U = Unacceptable. N/A = Not Applicable. FDR = Flood Damage Reduction



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Flood Damage Reduction Segment / System
Inspection Report
Dyke Creek - Left Bank and Channel,

General Items for All Flood Damage Reduction
Segments / Systems
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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Unwanted Vegetation Growth ¹	U	A	The levee has little or no unwanted vegetation (trees, bush, or undesirable weeds), except for vegetation that is properly contained and/or situated on overbuilt sections, such that the mandatory 3-foot root-free zone is preserved around the levee profile. The levee has been recently mowed. The vegetation-free zone extends 15 feet from both the landside and riverside toes of the levee to the centerline of the tree. If the levee access easement doesn't extend to the described limits, then the vegetation-free zone must be maintained to the easement limits. Reference EM 1110-2-301 or Corps policy for regional vegetation variance.	N21D_2019_r_0002: Station_1 35+00: Trees on left bank levee landside slope 700' upstream of Drop Structure. (Dyke Creek): Remove trees. (U) N21D_2019_r_0006: Station_1 D 35+00: Station_2 D 35+00: Vegetation in excess of 12" on right bank levee crown from drop structure to 400' upstream.: Remove brush and mow vegetation to 3"-6" height. (U)
		M	Minimal vegetation growth (brush, weeds, or trees 2 inches in diameter or smaller) is present within the zones described above. This vegetation must be removed but does not currently threaten the operation or integrity of the levee.	
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above and must be removed to reestablish or ascertain levee integrity.	
2. Sod Cover	A	A	There is good coverage of sod over the levee.	
		M	Approximately 25% of the sod cover is missing or damaged over a significant portion or over significant portions of the levee embankment. This may be the result of over-grazing or feeding on the levee, unauthorized vehicular traffic, chemical or insect problems, or burning during inappropriate seasons.	
		U	Over 50% of the sod cover is missing or damaged over a significant portion or portions of the levee embankment.	
		N/A	Surface protection is provided by other means.	
3. Encroachments	M	A	No trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the levee.	N21D_2019_r_0001: Station_1 35+00: Unauthorized alteration (E-49): levee overbuild added on to USACE levee at upstream limit by Soil Conservation Service to levee upstream limit. (Dyke Creek): Submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0008: Station_1 D 35+00: Tree debris on levee waterside slope, 550' downstream from upstream limit of Dyke Creek.: Remove tree debris. (M)
		M	Trash, debris, unauthorized farming activity, structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the levee.	
4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag	NA	A	Closure structure in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components are clearly marked and installation instructions/ procedures readily available. Trial erections have been accomplished in accordance with the O&M Manual.	

Key: A = Acceptable. M = Minimally Acceptable; Maintenance is required. U = Unacceptable. N/A = Not Applicable. FDR = Flood Damage Reduction



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Flood Damage Reduction Segment / System Inspection Report Dyke Creek - Left Bank and Channel,

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Levee Embankments
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Levee Embankments

For use during Initial and Continuing Eligibility Inspections of levee segments / systems

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
Closures) (A or U only)		U	Any of the following issues is cause for this rating: Closure structure in poor condition. Parts missing or corroded. Placing equipment may not be available within the anticipated warning time. The storage vaults cannot be opened during the time of inspection. Components of closure are not clearly marked and installation instructions/ procedures are not readily available. Trial erections have not been accomplished in accordance with the O&M Manual.	
		N/A	There are no closure structures along this component of the FDR segment / system.	
5. Slope Stability	A	A	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	
		M	Minor slope stability problems that do not pose an immediate threat to the levee embankment.	
		U	Major slope stability problems (ex. deep seated sliding) identified that must be repaired to reestablish the integrity of the levee embankment.	
6. Erosion/ Bank Caving	A	A	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	
		M	There are areas where minor erosion is occurring or has occurred on or near the levee embankment, but levee integrity is not threatened.	
		U	Erosion or caving is occurring or has occurred that threatens the stability and integrity of the levee. The erosion or caving has progressed into the levee section or into the extended footprint of the levee foundation and has compromised the levee foundation stability.	
7. Settlement ²	A	A	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	
		M	Minor irregularities that do not threaten integrity of levee. Records are incomplete or inclusive.	
		U	Obvious variations in elevation over significant reaches. No records exist or records indicate that design elevation is compromised.	
8. Depressions/ Rutting	A	A	There are scattered, shallow ruts, pot holes, or other depressions on the levee that are unrelated to levee settlement. The levee crown, embankments, and access road crowns are well established and drain properly without any ponded water.	
		M	There are some infrequent minor depressions less than 6 inches deep in the levee crown, embankment, or access roads that will pond water.	
		U	There are depressions greater than 6 inches deep that will pond water.	
9. Cracking	A	A	Minor longitudinal, transverse, or desiccation cracks with no vertical movement along the crack. No cracks extend continuously through the levee crest.	
		M	Longitudinal and/or transverse cracks up to 6 inches in depth with no vertical movement along the crack. No cracks extend continuously through the levee crest. Longitudinal cracks are no longer than the height of the levee.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	Cracks exceed 6 inches in depth. Longitudinal cracks are longer than the height of the levee and/or exhibit vertical movement along the crack. Transverse cracks extend through the entire levee width.	
10. Animal Control	A	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	
		M	The existing animal burrow control program needs to be improved. Several burrows are present which may lead to seepage or slope stability problems, and they require immediate attention.	
		U	Animal burrow control program is not effective or is nonexistent. Significant maintenance is required to fill existing burrows, and the levee will not provide reliable flood protection until this maintenance is complete.	
11. Culverts/ Discharge Pipes ³ (This item includes both concrete and corrugated metal pipes.)	U	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	N21D_2019_r_0051: Station_1 D 35+00: 24" storm sewer under Dyke Creek levee, at downstream end of levee. Unacceptable pipe based on the lack of pipe videotape inspection.: Perform pipe videotape inspection and submit pipe assessment to USACE. (U) N21D_2019_r_0053: Station_1 D 35+00: 10" water main under levee not videotape inspected.: Pipe is under constant use and can not be videotaped. Verify pipe condition using other means. (M)
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
12. Riprap Revetments &	A	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
Bank Protection		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
13. Revetments other than Riprap	NA	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	
		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		N/A	There are no such revetments protecting this feature of the segment / system.	
14. Underseepage Relief Wells/ Toe Drainage Systems	NA	A	Toe drainage systems and pressure relief wells necessary for maintaining FDR segment / system stability during high water functioned properly during the last flood event and no sediment is observed in horizontal system (if applicable). Nothing is observed which would indicate that the drainage systems won't function properly during the next flood, and maintenance records indicate regular cleaning. Wells have been pumped tested within the past 5 years and documentation is provided.	
		M	Toe drainage systems or pressure relief wells are damaged and may become clogged if they are not repaired. Maintenance records are incomplete or indicate irregular cleaning and pump testing.	
		U	Toe drainage systems or pressure relief wells necessary for maintaining FDR segment / system stability during flood events have fallen into disrepair or have become clogged. No maintenance records. No documentation of the required pump testing.	
		N/A	There are no relief wells/ toe drainage systems along this component of the FDR segment / system.	
15. Seepage	A	A	No evidence or history of unrepaired seepage, saturated areas, or boils.	
		M	Evidence or history of minor unrepaired seepage or small saturated areas at or beyond the landside toe but not on the landward slope of levee. No evidence of soil transport.	
		U	Evidence or history of active seepage, extensive saturated areas, or boils.	

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¹ If there is significant growth on the levee that inhibits the inspection of animal burrows or other items, the inspection should be ended until this item is corrected.

² Detailed survey elevations are normally required during Periodic Inspections, and whenever there are obvious visual settlements.

³ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

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	<p>Inspect ID: N21D_2019_r_0002 Title: USACE_CELRB_N21D_2019_r_0002_1.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Unacceptable; Remarks: Trees on left bank levee landside slope 700' upstream of Drop Structure. (Dyke Creek); Action: Remove trees.; Station_1: 35+00</p>
	<p>Inspect ID: N21D_2019_r_0002 Title: USACE_CELRB_N21D_2019_r_0002_2.jpg Rated Item: 1. Unwanted Vegetation Growth Caption: Rating: Unacceptable; Remarks: Trees on left bank levee landside slope 700' upstream of Drop Structure. (Dyke Creek); Action: Remove trees.; Station_1: 35+00</p>



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	<p>Inspect ID: N21D_2019_r_0008 Title: USACE_CELRB_N21D_2019_r_0008_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Tree debris on levee waterside slope, 550' downstream from upstream limit of Dyke Creek.; Action: Remove tree debris.; Station_1: D 35+00</p>



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Interior Drainage System

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	A	A	No obstructions, vegetation, debris, or sediment accumulation noted within interior drainage channels or blocking the culverts, inlets, or discharge areas. Concrete joints and weep holes are free of grass and weeds.	N21D_2019_r_0052: Station_1 D 35+00: Station_2 D 35+00: 24" CMP on left bank with inlet upstream of Dyke Creek drop structure and outlet just downstream of Dyke Creek drop structure. Pipe does not go under or through levee.: NA (A)
		M	Obstructions, vegetation, debris, or sediment are minor and have not impaired channel flow capacity or blocked more than 10% of any culvert openings, but should be removed. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	
		U	Obstructions, vegetation, debris, or sediment have impaired the channel flow capacity or blocked more than 10% of a culvert opening. Sediment and debris removal required to re-establish flow capacity.	
2. Encroachments	A	A	No trash, debris, unauthorized structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the interior drainage system.	
		M	Trash, debris, unauthorized structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of this component of the interior drainage system.	
3. Ponding Areas	NA	A	No trash, debris, structures, or other obstructions present within the ponding areas. Sediment deposits do not exceed 10% of capacity.	
		M	Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit operations and maintenance. Sediment deposits do not exceed 30% of capacity.	
		U	Trash, debris, excavations, structures, or other obstructions, or other encroachments or activities noted that will inhibit operations, maintenance, or emergency work. Sediment deposits exceeds 30% of capacity.	
		N/A	There are no ponding areas associated with the interior drainage system.	
4. Fencing and Gates ¹	NA	A	Fencing is in good condition and provides protection against falling or unauthorized access. Gates open and close freely, locks are in place, and there is little corrosion on metal parts.	
		M	Fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	
		U	Fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous features are not secured.	
		N/A	There are no features noted that require safety fencing.	
5. Concrete Surfaces (Such as gate)	NA	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	

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Interior Drainage System

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
wells, outfalls, intakes, or culverts)		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
6. Tilting, Sliding or Settlement of Concrete and Sheet Pile Structures ² (Such as gate wells, outfalls, intakes, or culverts)	NA	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the interior drainage system.	
7. Foundation of Concrete Structures ³ (Such as culverts, inlet and discharge structures, or gatewells.)	NA	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. The rate of erosion is such that the structure is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that may lead to structural instabilities before the next inspection.	
		N/A	There are no concrete items in the interior drainage system.	
8. Monolith Joints	NA	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/ desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no monolith joints in the interior drainage system.	
9. Culverts/ Discharge Pipes ⁴	U	A	There are no breaks, holes, cracks in the discharge pipes/ culverts that would result in significant water leakage. The pipe shape is still essentially circular. All joints appear to be closed and the soil tight. Corrugated metal pipes, if present, are in good condition with 100% of the original coating still in place (either asphalt or galvanizing) or have been relined with appropriate material, which is still in good condition. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	Refer to Rated Item 11. Culverts/ Discharge Pipes of the Levee Embankments section of this attachment.
		M	There are a small number of corrosion pinholes or cracks that could leak water and need to be repaired, but the entire length of pipe is still structurally sound and is not in danger of collapsing. Pipe shape may be ovalized in some locations but does not appear to be approaching a curvature reversal. A limited number of joints may have opened and soil loss may be beginning. Any open joints should be repaired prior to the next inspection. Corrugated metal pipes, if present, may be showing corrosion and pinholes but there are no areas with total section loss. Condition of pipes has been verified using television camera video taping or visual inspection methods within the past five years, and the report for every pipe is available for review by the inspector.	
		U	Culvert has deterioration and/or has significant leakage; it is in danger of collapsing or as already begun to collapse. Corrugated metal pipes have suffered 100% section loss in the invert. HOWEVER: Even if pipes appear to be in good condition, as judged by an external visual inspection, an Unacceptable Rating will be assigned if the condition of pipes has not been verified using television camera video taping or visual inspection methods within the past five years, and reports for all pipes are not available for review by the inspector.	
		N/A	There are no discharge pipes/ culverts.	
10. Sluice / Slide Gates ⁵	NA	A	Gates open and close freely to a tight seal or minor leakage. Gate operators are in good working condition and are properly maintained. Sill is free of sediment and other obstructions. Gates and lifters have been maintained and are free of corrosion. Documentation provided during the inspection.	
		M	Gates and/or operators have been damaged or have minor corrosion, and open and close with resistance or binding. Leakage quantity is controllable, but maintenance is required. Sill is free of sediment and other obstructions.	
		U	Gates do not open or close and/or operators do not function. Gate, stem, lifter and/or guides may be damaged or have major corrosion.	
		N/A	There are no sluice/ slide gates.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
11. Flap Gates/ Flap Valves/ Pinch Valves ¹	NA	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	
		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	
12. Trash Racks (non-mechanical)	NA	A	Trash racks are fastened in place and properly maintained.	
		M	Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station, bars are corroded to the point that up to 10% of the sectional area may be lost. Repair or replacement is required.	
		U	Trash racks are missing or damaged to the extent that they are no longer functional and must be replaced. (For example, more than 10% of the sectional area may be lost.)	
		N/A	There are no trash racks, or they are covered in the pump stations section of the report.	
13. Other Metallic Items	NA	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	
		M	Corrosion seen on metallic parts appears to be maintainable.	
		U	Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	
		N/A	There are no other significant metallic items.	
14. Riprap Revetments of Inlet/ Discharge Areas	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
15. Revetments other than Riprap	NA	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

¹ Proper operation of this item must be demonstrated during the inspection.

² The sponsor should be monitoring any observed movement to verify whether the movement is active or inactive.

³ Inspectors must have as-built drawings available during the inspection so that the lateral distance to the heel and toe of the floodwalls can be determined in the field.

⁴ The decision on whether or not USACE inspectors should enter a pipe to perform a detailed inspection must be made at the USACE District level. This decision should be made in conjunction with the District Safety Office, as pipes may be considered confined spaces. This decision should consider the age of the pipe, the diameter of the pipe, the apparent condition of the pipe, and the length of the pipe. If a pipe is entered for the purposes of inspection, the inspector should record observations with a video camera in order that the condition of the entire pipe, including all joints, can later be assessed. Additionally, the video record provides a baseline to which future inspections can be compared.

⁵ Proper operation of the gates (full open and closed) must be demonstrated during the inspection if no documentation is available. Be aware of both manual and electrical operators.

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	<p>Inspect ID: N21D_2019_r_0052 Title: USACE_CELRB_N21D_2019_r_0052_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Acceptable; Remarks: 24" CMP on left bank with inlet upstream of Dyke Creek drop structure and outlet just downstream of Dyke Creek drop structure. Pipe does not go under or through levee.; Action: NA; Station_1: D 35+00; Station_2: D 35+00</p>



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Flood Damage Reduction Channels

For use during Initial and Continuing Eligibility Inspections of flood damage reduction channels

Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
1. Vegetation and Obstructions	U	A	No obstructions, vegetation, debris, or sediment accumulation within the channel. Concrete channel joints and weep holes are free of grass and weeds.	N21D_2019_r_0004: Station_1 35+00: Log debris in channel on right bank shoal 500' upstream of drop structure. (Dyke Creek): Remove debris. (M)
		M	Obstructions (including log jams), vegetation, debris, or sediment are minor and have not impaired channel flow capacity, but should be removed. Sediment shoals have not developed to the extent that they can support vegetation other than non-aquatic grasses. A limited volume of grass and weeds may be present in concrete channel joints and weep holes.	N21D_2019_r_0012: Station_1 D 35+00: Fallen tree on drop structure.: Remove fallen tree from drop structure. (M)
		U	Obstructions (including log jams), vegetation, debris or sediment have impaired the channel flow capacity. Sediment shoals are well established and support woody and/or brushy vegetation. Sediment and debris removal required to re-establish flow capacity.	N21D_2019_r_0019: Station_1 35+00: Station_2 24+00: Vegetation in excess of 12" on left bank from Broad Street bridge to Dyke Creek drop structure.: Mow vegetation to 3"-6" height. (M) N21D_2019_r_0020: Station_1 D 24+00: Station_2 D 26+00: Trees and vegetation on left bank channel side slope from Broad Street bridge to 125' upstream.: Remove trees and vegetation. (U) N21D_2019_r_0021: Station_1 D 24+00: Tree debris in channel on pier of Broad Street bridge. (Dyke Creek): Remove tree debris. (M) N21D_2019_r_0034: Station_1 D 17+00: Station_2 D 11+00: Vegetation in excess of 12" on tops both banks of channel from State Route 417 Bridge to Main Street Bridge.: Mow vegetation to 3"-6" height. (M) N21D_2019_r_0038: Station_1 D 12+00: Tree debris in channel on pier of State Route 417 Bridge.: Remove tree debris. (M) N21D_2019_r_0040: Station_1 D 11+00: Station_2 D 2+00: Vegetation growing within left and right bank concrete channel side slopes from State Route 417 Bridge to the onvergence of Dyke Creek.: Remove vegetation from concrete channel side slopes. (M)
2. Shoaling ¹ (sediment deposition)	U	A	No shoaling or minor, non-vegetated shoaling is present.	N21D_2019_r_0005: Station_1 35+00: Station_2 35+00: Shoaling (S-14) on right bank from 200' upstream of drop structure to upstream project limit. (Dyke Creek):. Remove shoaling. (M)
		M	More widespread vegetated and non-vegetated shoaling is present. Non-aquatic grasses are present on shoal. No trees or brush is present on shoal, and channel flow is not significantly reduced. Sediment and debris removal recommended.	N21D_2019_r_0015: Station_1 34+00: Vegetated shoal (S-15) in center of channel 100' downstream of Dyke Creek drop structure to 200' downstream of drop structure.: Remove shoal. (M)
		U	Shoaling is well established, stabilized by saplings, brush, or other vegetation. Shoals are diverting flow to channel walls. Channel flow capacity is reduced and maintenance is required.	N21D_2019_r_0018: Station_1 24+00: Station_2 33+00: Shoaling (S-16) on left bank and in center of channel from Dyke Creek drop structure to Broadway Street Bridge.: Remove shoal. (M) N21D_2019_r_0035: Station_1 12+00: Station_2 18+00: Vegetated shoals (S-17) on concrete side slopes on both

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				banks and in channel from State Route 417 Bridge to Main Street Bridge.: Remove vegetated shoal from concrete side slopes. (U) N21D_2019_r_0041: Station_1 11+00: Station_2 2+00: Vegetated shoaling (S-18) on both banks from convergence of Dyke Creek to the State Route 417 Bridge.: Remove shoaling. (U)
3. Encroachments	M	A	No trash, debris, unauthorized structures, excavations, or other obstructions present within the easement area. Encroachments have been previously reviewed by the Corps, and it was determined that they do not diminish proper functioning of the channel.	N21D_2019_r_0009: Station_1 35+00: Unauthorized alteration (E-50): Concrete blocks, guardrail, utility pole, guy wire, and dead end sign encroachments on left bank at end of Miller Street just upstream of drop structure. (Dyke Creek): Remove or submit Section 408 Alteration Request to USACE. (M)
		M	Trash, debris, unauthorized structures, excavations, or other obstructions present, or inappropriate activities noted that should be corrected but will not inhibit operations and maintenance or emergency operations. Encroachments have not been reviewed by the Corps.	N21D_2019_r_0011: Station_1 35+00: Dyke Creek drop structure in satisfactory condition.: NA (A)
		U	Unauthorized encroachments or inappropriate activities noted are likely to inhibit operations and maintenance, emergency operations, or negatively impact the integrity of the channel.	N21D_2019_r_0017: Station_1 D 32+00: Unauthorized alteration (E-50a): 18" CMP encroachment on left bank, at Loring Ave.: Remove or submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0023: Station_1 21+00: Unauthorized alteration (E-51): wood stairs on left bank channel slope just downstream of railroad bridge.: Submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0024: Station_1 D 22+00: 12" HDPE encroachment on left bank, 50' downstream of Railroad bridge.: No alteration request needed for channel pipes less than or equal to 12". (A) N21D_2019_r_0025: Station_1 21+00: Unauthorized alteration (E-52): wooden stairs and railing encroachments on left bank channel slope just downstream of railroad bridge.: Remove or submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0026: Station_1 D 21+00: 8" PVC outfall encroachment on left bank, 125' downstream of railroad bridge.: No alteration request needed for channel pipes less than or equal to 12". (A) N21D_2019_r_0028: Station_1 D 20+00: 12' metal outfall encroachment on left bank, just upstream of Main Street bridge.: No alteration request needed for channel pipes less than or equal to 12". (A) N21D_2019_r_0029: Station_1 20+00: Unauthorized alteration (E-53): wood stairs left bank channel slope.:

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
				Remove or submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0031: Station_1 D 19+00: Unauthorized alteration (E-53a): 24" CMP outfall on left bank channel sideslope, 50' upstream of Main Street bridge.: Remove or submit Section 408 Alteration Request to USACE. (M) N21D_2019_r_0037: Station_1 11+00: Approved alteration: State Route 417 Bridge replacement over Dyke Creek.: NA (A) N21D_2019_r_0039: Station_1 15+00: Station_2 13+00: Unauthorized alteration (E-55): Heating, electrical, and plumbing yard on Dyke Creek left bank just upstream of State Route 417 Bridge.: Remove or submit Section 408 Alteration Request to USACE. (M)
4. Erosion	M	A	No head cutting or horizontal deviation observed.	N21D_2019_r_0013: Station_1 D 35+00: Erosion on left bank channel sideslope just downstream of drop structure.: Repair erosion. (M) N21D_2019_r_0027: Station_1 D 20+00: Erosion on left bank channel sideslope 175' upstream of Main Street Bridge, caused by parking lot drainage.: Repair erosion and mitigate parking lot drainage. (M) N21D_2019_r_0030: Station_1 19+00: Erosion on left bank upstream of Main Street.: Repair erosion. (M)
		M	Head cutting and horizontal deviation evident, but is less than 1 foot from the designed grade or cross section.	
		U	Head cutting and horizontal deviation of more than 1 foot from the designed grade or cross section. Corrective actions required to stop or slow erosion.	
5. Concrete Surfaces	A	A	Negligible spalling, scaling or cracking. If the concrete surface is weathered or holds moisture, it is still satisfactory but should be seal coated to prevent freeze/ thaw damage.	
		M	Spalling, scaling, and open cracking present, but the immediate integrity or performance of the structure is not threatened. Reinforcing steel may be exposed. Repairs/ sealing is necessary to prevent additional damage during periods of thawing and freezing.	
		U	Surface deterioration or deep cracks present that may result in an unreliable structure. Any surface deterioration that exposes the sheet piling or lies adjacent to monolith joints may indicate underlying reinforcement corrosion and is unacceptable.	
		N/A	There are no concrete items in the channel.	
6. Tilting, Sliding or Settlement of Concrete Structures ²	A	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	
		M	There are areas of tilting, sliding, or settlement (either active or inactive) that need to be repaired. The maximum offset, either laterally or vertically, does not exceed 2 inches unless the movement can be shown to be no longer actively occurring. The integrity of the structure is not in danger.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
		U	There are areas of tilting, sliding, or settlement (either active or inactive) that threaten the structure's integrity and performance. Any movement that has resulted in failure of the waterstop (possibly identified by daylight visible through the joint) is unacceptable. Differential movement of greater than 2 inches between any two adjacent monoliths, either laterally or vertically, is unacceptable unless it can be shown that the movement is no longer active. Also, if the floodwall is of I-wall construction, then any visible or measurable tilting of the wall toward the protected side that has created an open horizontal crack on the riverside base of a monolith is unacceptable.	
		N/A	There are no concrete items in the channel.	
7. Foundation of Concrete Structures ³	A	A	No active erosion, scouring, or bank caving that might endanger the structure's stability.	
		M	There are areas where the ground is eroding towards the base of the structure. Efforts need to be taken to slow and repair this erosion, but it is not judged to be close enough to the structure or to be progressing rapidly enough to affect structural stability before the next inspection. For the purposes of inspection, the erosion or scour is not closer to the riverside face of the wall than twice the floodwall's underground base width if the wall is of L-wall or T-wall construction; or if the wall is of sheetpile or I-wall construction, the erosion is not closer than twice the wall's visible height. Additionally, rate of erosion is such that the wall is expected to remain stable until the next inspection.	
		U	Erosion or bank caving observed that is closer to the wall than the limits described above, or is outside these limits but may lead to structural instabilities before the next inspection. Additionally, if the floodwall is of I-wall or sheetpile construction, the foundation is unacceptable if any turf, soil or pavement material got washed away from the landside of the I-wall as the result of a previous overtopping event.	
		N/A	There are no concrete items in the channel.	
8. Slab and Monolith Joints	NA	A	The joint material is in good condition. The exterior joint sealant is intact and cracking/desiccation is minimal. Joint filler material and/or waterstop is not visible at any point.	
		M	The joint material has appreciable deterioration to the point where joint filler material and/or waterstop is visible in some locations. This needs to be repaired or replaced to prevent spalling and cracking during freeze/ thaw cycles, and to ensure water tightness of the joint.	
		U	The joint material is severely deteriorated or the concrete adjacent to the monolith joints has spalled and cracked, damaging the waterstop; in either case damage has occurred to the point where it is apparent that the joint is no longer watertight and will not provide the intended level of protection during a flood.	
		N/A	There are no concrete items in the channel.	
9. Flap Gates/ Flap Valves/	NA	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	

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Rated Item	Rating	Rating Guidelines		Location/Remarks/Recommendations
Pinch Valves ⁴		M	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	
		N/A	There are no flap gates.	
10. Riprap Revetments & Banks	U	A	No riprap displacement or stone degradation that could pose an immediate threat to the integrity of channel bank. Riprap intact with no woody vegetation present.	N21D_2019_r_0003: Station_1 35+00: Station_2 35+00: Trees and unwanted vegetation in riprap on left bank waterside slope from upstream limit of Dyke Creek to 300' downstream of the Drop Structure. (Dyke Creek): Remove trees and unwanted vegetation. (U) N21D_2019_r_0010: Station_1 35+00: Trees and vegetation in riprap on right bank upstream of Dyke Creek drop structure.: Remove vegetation and trees. (U) N21D_2019_r_0016: Station_1 35+00: Station_2 28+00: Trees and vegetation in riprap on right bank from Broad Street bridge to Dyke Creek drop structure.: Remove unwanted vegetation. (U) N21D_2019_r_0022: Station_1 24+00: Station_2 22+00: Significant vegetation and trees in riprap on both banks between Railroad bridge and Broad Street bridge. (Dyke Creek): Remove trees and vegetation from riprap. (U) N21D_2019_r_0032: Station_1 22+00: Station_2 18+00: Trees and significant vegetation in riprap on both banks between Main Street Bridge and Railroad Bridge.: Remove trees and vegetation from riprap. (U) N21D_2019_r_0033: Station_1 17+00: Significant trees and vegetation in riprap on both banks just 100' of bridgedownstream of Main Street bridge.: Remove trees and vegetation from riprap. (U)
		M	Minor riprap displacement or stone degradation that could pose an immediate threat to the integrity of the channel bank. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant riprap displacement, exposure of bedding, or stone degradation observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Rock protection is hidden by dense brush, trees, or grasses.	
		N/A	There is no riprap protecting this feature of the segment / system, or riprap is discussed in another section.	
11. Revetments other than Riprap	M	A	Existing revetment protection is properly maintained, undamaged, and clearly visible.	N21D_2019_r_0036: Station_1 D 18+00: Station_2 D 12+00: Vegetation growing within left and right bank concrete channel side slopes from Main Street Bridge to State Route 417 Bridge.: Remove vegetation from concrete channel side slopes. (M)
		M	Minor revetment displacement or deterioration that does not pose an immediate threat to the integrity of the levee. Unwanted vegetation must be cleared or sprayed with an appropriate herbicide.	
		U	Significant revetment displacement, deterioration, or exposure of bedding observed. Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Revetment protection is hidden by dense brush and trees.	
		N/A	There are no such revetments protecting this feature of the segment / system.	

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¹ If weather and flow conditions allow, inspectors should walk in the channel and probe shoal areas in order to estimate extent of blockage of the cross-sectional area where shoaling is present.

² The sponsor should be monitoring any observed movement to verify whether the movement is active or inactive.

³ Inspectors must have as-built drawings available during the inspection so that the lateral distance to the heel and toe of the floodwalls can be determined in the field.

⁴ Proper operation of this item must be demonstrated during the inspection.

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	<p>Inspect ID: N21D_2019_r_0004 Title: USACE_CELRB_N21D_2019_r_0004_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Log debris in channel on right bank shoal 500' upstream of drop structure. (Dyke Creek); Action: Remove debris.; Station_1: 35+00</p>
	<p>Inspect ID: N21D_2019_r_0012 Title: USACE_CELRB_N21D_2019_r_0012_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Fallen tree on drop structure.; Action: Remove fallen tree from drop structure.; Station_1: D 35+00</p>



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	<p>Inspect ID: N21D_2019_r_0019 Title: USACE_CELRB_N21D_2019_r_0019_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation in excess of 12" on left bank from Broad Street bridge to Dyke Creek drop structure.; Action: Mow vegetation to 3"-6" height.; Station_1: 35+00; Station_2: 24+00</p>
	<p>Inspect ID: N21D_2019_r_0020 Title: USACE_CELRB_N21D_2019_r_0020_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Unacceptable; Remarks: Trees and vegetation on left bank channel side slope from Broad Street bridge to 125' upstream.; Action: Remove trees and vegetation.; Station_1: D 24+00; Station_2: D 26+00</p>



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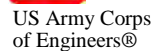
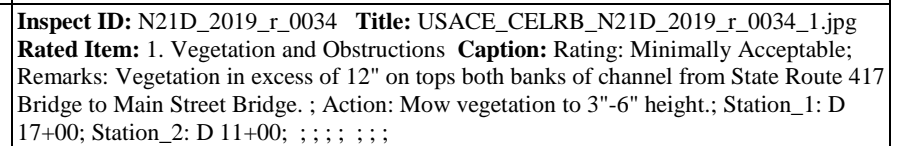
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Inspect ID: N21D_2019_r_0021 **Title:** USACE_CELRB_N21D_2019_r_0021_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
 Remarks: Tree debris in channel on pier of Broad Street bridge. (Dyke Creek); Action:
 Remove tree debris.; Station_1: D 24+00



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Inspect ID: N21D_2019_r_0034 **Title:** USACE_CELRB_N21D_2019_r_0034_2.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
 Remarks: Vegetation in excess of 12" on tops both banks of channel from State Route 417 Bridge to Main Street Bridge. ; Action: Mow vegetation to 3"-6" height.; Station_1: D 17+00; Station_2: D 11+00; ; ; ; ; ; ;



Inspect ID: N21D_2019_r_0038 **Title:** USACE_CELRB_N21D_2019_r_0038_1.jpg
Rated Item: 1. Vegetation and Obstructions **Caption:** Rating: Minimally Acceptable;
 Remarks: Tree debris in channel on pier of State Route 417 Bridge.; Action: Remove tree debris.; Station_1: D 12+00



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	<p>Inspect ID: N21D_2019_r_0040 Title: USACE_CELRB_N21D_2019_r_0040_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation growing within left and right bank concrete channel side slopes from State Route 417 Bridge to the onvergence of Dyke Creek.; Action: Remove vegetation from concrete channel side slopes.; Station_1: D 11+00; Station_2: D 2+00</p>
	<p>Inspect ID: N21D_2019_r_0040 Title: USACE_CELRB_N21D_2019_r_0040_2.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Minimally Acceptable; Remarks: Vegetation growing within left and right bank concrete channel side slopes from State Route 417 Bridge to the onvergence of Dyke Creek.; Action: Remove vegetation from concrete channel side slopes.; Station_1: D 11+00; Station_2: D 2+00</p>



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	<p>Inspect ID: N21D_2019_r_0005 Title: USACE_CELRB_N21D_2019_r_0005_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Shoaling (S-14) on right bank from 200' upstream of drop structure to upstream project limit. (Dyke Creek).; Action: Remove shoaling.; Station_1: 35+00; Station_2: 35+00</p>
	<p>Inspect ID: N21D_2019_r_0005 Title: USACE_CELRB_N21D_2019_r_0005_2.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Minimally Acceptable; Remarks: Shoaling (S-14) on right bank from 200' upstream of drop structure to upstream project limit. (Dyke Creek).; Action: Remove shoaling.; Station_1: 35+00; Station_2: 35+00</p>



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Inspect ID: N21D_2019_r_0015 **Title:** USACE_CELRB_N21D_2019_r_0015_1.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Minimally Acceptable;
Remarks: Vegetated shoal (S-15) in center of channel 100' downstream of Dyke Creek drop structure to 200' downstream of drop structure.; **Action:** Remove shoal.; **Station_1:** 34+00



Inspect ID: N21D_2019_r_0018 **Title:** USACE_CELRB_N21D_2019_r_0018_1.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Minimally Acceptable;
Remarks: Shoaling (S-16) on left bank and in center of channel from Dyke Creek drop structure to Broadway Street Bridge.; **Action:** Remove shoal.; **Station_1:** 24+00; **Station_2:** 33+00



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Inspect ID: N21D_2019_r_0035 **Title:** USACE_CELRB_N21D_2019_r_0035_1.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Unacceptable;
Remarks: Vegetated shoals (S-17) on concrete side slopes on both banks and in channel from State Route 417 Bridge to Main Street Bridge.; Action: Remove vegetated shoal from concrete side slopes.; Station_1: 12+00; Station_2: 18+00



Inspect ID: N21D_2019_r_0035 **Title:** USACE_CELRB_N21D_2019_r_0035_2.jpg
Rated Item: 2. Shoaling (sediment deposition) **Caption:** Rating: Unacceptable;
Remarks: Vegetated shoals (S-17) on concrete side slopes on both banks and in channel from State Route 417 Bridge to Main Street Bridge.; Action: Remove vegetated shoal from concrete side slopes.; Station_1: 12+00; Station_2: 18+00



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	<p>Inspect ID: N21D_2019_r_0041 Title: USACE_CELRB_N21D_2019_r_0041_1.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Vegetated shoaling (S-18) on both banks from convergence of Dyke Creek to the State Route 417 Bridge.; Action: Remove shoaling.; Station_1: 11+00; Station_2: 2+00</p>
	<p>Inspect ID: N21D_2019_r_0041 Title: USACE_CELRB_N21D_2019_r_0041_2.jpg Rated Item: 2. Shoaling (sediment deposition) Caption: Rating: Unacceptable; Remarks: Vegetated shoaling (S-18) on both banks from convergence of Dyke Creek to the State Route 417 Bridge.; Action: Remove shoaling.; Station_1: 11+00; Station_2: 2+00</p>



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Inspect ID: N21D_2019_r_0009 **Title:** USACE_CELRB_N21D_2019_r_0009_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-50): Concrete blocks, guardrail, utility pole, guy wire, and dead end sign encroachments on left bank at end of Miller Street just upstream of drop structure. (Dyke Creek); Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 35+00



Inspect ID: N21D_2019_r_0017 **Title:** USACE_CELRB_N21D_2019_r_0017_1.jpg
Rated Item: 3. Encroachments **Caption:** Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-50a): 18" CMP encroachment on left bank, at Loring Ave.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: D 32+00



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	<p>Inspect ID: N21D_2019_r_0023 Title: USACE_CELRB_N21D_2019_r_0023_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-51): wood stairs on left bank channel slope just downstream of railroad bridge.; Action: Submit Section 408 Alteration Request to USACE.; Station_1: 21+00</p>
	<p>Inspect ID: N21D_2019_r_0025 Title: USACE_CELRB_N21D_2019_r_0025_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-52): wooden stairs and railing encroachments on left bank channel slope just downstream of railroad bridge.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 21+00</p>



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	<p>Inspect ID: N21D_2019_r_0029 Title: USACE_CELRB_N21D_2019_r_0029_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-53): wood stairs left bank channel slope. ; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 20+00; ; ; ; ;</p>
	<p>Inspect ID: N21D_2019_r_0039 Title: USACE_CELRB_N21D_2019_r_0039_1.jpg Rated Item: 3. Encroachments Caption: Rating: Minimally Acceptable; Remarks: Unauthorized alteration (E-55): Heating, electrical, and plumbing yard on Dyke Creek left bank just upstream of State Route 417 Bridge.; Action: Remove or submit Section 408 Alteration Request to USACE.; Station_1: 15+00; Station_2: 13+00</p>



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	<p>Inspect ID: N21D_2019_r_0013 Title: USACE_CELRB_N21D_2019_r_0013_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Erosion on left bank channel sideslope just downstream of drop structure.; Action: Repair erosion.; Station_1: D 35+00</p>
	<p>Inspect ID: N21D_2019_r_0027 Title: USACE_CELRB_N21D_2019_r_0027_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Erosion on left bank channel sideslope 175' upstream of Main Street Bridge, caused by parking lot drainage.; Action: Repair erosion and mitigate parking lot drainage.; Station_1: D 20+00</p>



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	<p>Inspect ID: N21D_2019_r_0030 Title: USACE_CELRB_N21D_2019_r_0030_1.jpg Rated Item: 4. Erosion Caption: Rating: Minimally Acceptable; Remarks: Erosion on left bank upstream of Main Street. ; Action: Repair erosion.; Station_1: 19+00; ; ; ; ;</p>
	<p>Inspect ID: N21D_2019_r_0003 Title: USACE_CELRB_N21D_2019_r_0003_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and unwanted vegetation in riprap on left bank waterside slope from upstream limit of Dyke Creek to 300' downstream of the Drop Structure. (Dyke Creek).; Action: Remove trees and unwanted vegetation.; Station_1: 35+00; Station_2: 35+00</p>



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Inspect ID: N21D_2019_r_0010 **Title:** USACE_CELRB_N21D_2019_r_0010_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Trees and vegetation in riprap on right bank upstream of Dyke Creek drop structure.; Action: Remove vegetation and trees.; Station_1: 35+00



Inspect ID: N21D_2019_r_0016 **Title:** USACE_CELRB_N21D_2019_r_0016_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Trees and vegetation in riprap on right bank from Broad Street bridge to Dyke Creek drop structure.; Action: Remove unwanted vegetation.; Station_1: 35+00; Station_2: 28+00



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	<p>Inspect ID: N21D_2019_r_0016 Title: USACE_CELRB_N21D_2019_r_0016_2.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and vegetation in riprap on right bank from Broad Street bridge to Dyke Creek drop structure.; Action: Remove unwanted vegetation.; Station_1: 35+00; Station_2: 28+00</p>
	<p>Inspect ID: N21D_2019_r_0022 Title: USACE_CELRB_N21D_2019_r_0022_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Significant vegetation and trees in riprap on both banks between Railroad bridge and Broad Street bridge. (Dyke Creek); Action: Remove trees and vegetation from riprap.; Station_1: 24+00; Station_2: 22+00</p>



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Inspect ID: N21D_2019_r_0022 **Title:** USACE_CELRB_N21D_2019_r_0022_2.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Significant vegetation and trees in riprap on both banks between Railroad bridge and Broad Street bridge. (Dyke Creek); Action: Remove trees and vegetation from riprap.; Station_1: 24+00; Station_2: 22+00



Inspect ID: N21D_2019_r_0022 **Title:** USACE_CELRB_N21D_2019_r_0022_3.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Significant vegetation and trees in riprap on both banks between Railroad bridge and Broad Street bridge. (Dyke Creek); Action: Remove trees and vegetation from riprap.; Station_1: 24+00; Station_2: 22+00



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Inspect ID: N21D_2019_r_0032 **Title:** USACE_CELRB_N21D_2019_r_0032_1.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Trees and significant vegetation in riprap on both banks between Main Street Bridge and Railroad Bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 22+00; Station_2: 18+00



Inspect ID: N21D_2019_r_0032 **Title:** USACE_CELRB_N21D_2019_r_0032_2.jpg
Rated Item: 10. Riprap Revetments & Banks **Caption:** Rating: Unacceptable; Remarks: Trees and significant vegetation in riprap on both banks between Main Street Bridge and Railroad Bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 22+00; Station_2: 18+00



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	<p>Inspect ID: N21D_2019_r_0032 Title: USACE_CELRB_N21D_2019_r_0032_3.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Trees and significant vegetation in riprap on both banks between Main Street Bridge and Railroad Bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 22+00; Station_2: 18+00</p>
	<p>Inspect ID: N21D_2019_r_0033 Title: USACE_CELRB_N21D_2019_r_0033_1.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Significant trees and vegetation in riprap on both banks just 100' of bridgedownstream of Main Street bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 17+00</p>



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	<p>Inspect ID: N21D_2019_r_0033 Title: USACE_CELRB_N21D_2019_r_0033_2.jpg Rated Item: 10. Riprap Revetments & Banks Caption: Rating: Unacceptable; Remarks: Significant trees and vegetation in riprap on both banks just 100' of bridgedownstream of Main Street bridge.; Action: Remove trees and vegetation from riprap.; Station_1: 17+00</p>
	<p>Inspect ID: N21D_2019_r_0036 Title: USACE_CELRB_N21D_2019_r_0036_1.jpg Rated Item: 11. Revetments other than Riprap Caption: Rating: Minimally Acceptable; Remarks: Vegetation growing within left and right bank concrete channel side slopes from Main Street Bridge to State Route 417 Bridge.; Action: Remove vegetation from concrete channel side slopes.; Station_1: D 18+00; Station_2: D 12+00</p>



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Attachment “K” – Dyke Creek Levee: Levee Inspection Map



Levee Inspection Map

Genesee River - Right Bank and Dyke Creek, Wellsville

Location: Wellsville, New York
Year/cycle: 2019 r
Inspection type: Routine
Inspected by:
Inspection date(s):
Observation ID prefix:
USACE_CELRB_N21R_2019_r
Map created: 20 November 2019

- Observation Points**
- Acceptable
 - Minimally Acceptable
 - Unacceptable
 - Not Applicable
- Observation Lines**
- Acceptable
 - Minimally Acceptable
 - Unacceptable
 - Not Applicable

0 420 840 Feet



Allegany New York

Potter Pennsylvania

Attachment “L” – Dyke Creek Levee: Rehabilitation Program
Eligibility Determination Checklist

Attachment "L" – Rehabilitation Program Eligibility Determination Checklists - Dyke Creek

SUBJECT: FY19 Joint Routine Inspection of Completed Works, Flood Risk Management Project, Genesee River and Dyke Creek, Wellsville, New York (09/23/19)

Rehabilitation Program Eligibility Determination		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Public sponsor provided maintenance information per the Public Sponsor Pre-Inspection Form.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	Non-federal levee system meets Initial Eligibility criteria.
N/A <input checked="" type="checkbox"/>		
If either of the above items is marked "No" the levee system is not eligible.		
Rating	Rated Item	
Levee Embankments		
A <input type="checkbox"/>	M <input checked="" type="checkbox"/>	U <input type="checkbox"/>
		3. Encroachments
A <input type="checkbox"/>	U <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
		4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures)
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Slope Stability
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Erosion/ Bank Caving
A <input checked="" type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		10. Animal Control
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input checked="" type="checkbox"/>
		11. Culverts/Discharge Pipes (This item includes both concrete and corrugated metal pipes.)
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		14. Underseepage Relief Wells/Toe Drainage Systems
Floodwalls - Not Applicable		
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		2. Encroachments
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		3. Closure Structures (Stop Log Closures and Gates)
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		5. Tilting, Sliding, or Settlement of Concrete Structures
A <input type="checkbox"/>	M <input type="checkbox"/>	U <input type="checkbox"/>
		6. Foundation of Concrete Structures

Attachment "L" – Rehabilitation Program Eligibility Determination Checklists - Dyke Creek

A	<input type="checkbox"/>	8. Underseepage Relief Wells/Toe Drainage Systems
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
Interior Drainage System		
A	<input type="checkbox"/>	9. Culverts/Discharge Pipes
M	<input type="checkbox"/>	
U	<input checked="" type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	10. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input checked="" type="checkbox"/>	
A	<input type="checkbox"/>	11. Flap Gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input checked="" type="checkbox"/>	
Pump Stations - Not Applicable		
A	<input type="checkbox"/>	17. Intake and Discharge Pipelines
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	18. Sluice/Slide Gates
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
A	<input type="checkbox"/>	19. Flap Gates/Flap Valves/Pinch Valves
M	<input type="checkbox"/>	
U	<input type="checkbox"/>	
N/A	<input type="checkbox"/>	
Rehabilitation Program Status		
Active	<input checked="" type="checkbox"/>	System meets all interim eligibility criteria, including having received a rating of A, M, N/A or Yes for all subset items and is therefore eligible for rehabilitation assistance.
Inactive	<input type="checkbox"/>	System does not meet interim eligibility requirements.
<p>As a result of this FY19 routine inspection, the overall rating for this system is "UNACCEPTABLE" (U) primarily due to extensive vegetation and channel shoaling. Culverts/Discharge Pipes are rated "U" due to videotape inspections for all pipes not being conducted by the required time frame. Normally the project would be made "INACTIVE" in the USACE RP, however, since there are no other "U" ratings, the sponsor is actively pursuing completion of the pipe inspections, and the conduits were rated either "A" or "M", USACE will allow an extension for this requirement until the date of the FY20 routine inspection. If videotape inspections are not completed by this time, the project will be made "INACTIVE" in the USACE Rehabilitation Program. With that said, this project is currently "ACTIVE" in the USACE RP.</p>		

Note: Item numbers listed above refer to their placement in the Flood Damage Reduction System Inspection Report. In order to be eligible, all of the following items must be rated A, M, N/A or Yes.

Attachment “M” – Project Map

Attachment “M” – Project Map



Attachment “N” – Public Sponsor Pre-Inspection Form re-
Inspection Form



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Flood Risk Mangement Project Sponsor Pre-Inspection Report

The following information is to be provided by the sponsor prior to an inspection. This information will be used to help evaluate the organizational capability of the sponsor to manage the flood risk management project maintenance program.

1. Project name and Local Sponsor Wellsville Flood Protection Project	New York State Department of Environmental Conservation
2. Reporting period: (month/day/year to month/day/year) September 26, 2018 to September 20, 2019	
3. Summary of maintenance required by last inspection report: Replace Riprap, Remove Vegetation, Remove Shoals, Remove Sediment from Drainage Structure Aprons, Repair Deteriorated Pipes, Repair Animal Burrows, Repair Concrete Cracks, Remove Debris, Address Encroachments(Remove or Authorize), Repair Erosion, Reconstruct Barrier Levee, Install Trash Rack.	
4. Summary of maintenance performed this reporting period: Pipe Repairs are ongoing, This project is almost complete. Project was Mowed, Drainage Structures were Trial Operated.	
5. Summary of maintenance planned next reporting period: Repairs to be Determined Based on Funding. Removal of woodchucks and filling of holes is planned.	
6. Summary of changes to project since last inspection: Pipe repairs include Slip Lining and Grouting. Sidewalk Trail under the Bollvar Road (NY Route 417) Bridge construction project is underway. Scour Repair left bank Genesee River downstream of Bolivar Road included in PL 84-99 Repair Request.	
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers:	