US Army Corps of Engineers®	Inspec	luction Segment / System ction Report			
Name of Segment / S	System: Alameda Creek FFCP Left Bank ALLB				
Public Sponsor(s):	Alameda County Flood Control District				
Public Sponsor Repr	esentative: Robert Brown				
Sponsor Phone: (510) 670 - 5730				
Sponsor Email: r	obertb@acpwa.org				
Corps of Engineers I	nspector: Anthony Galvan, Rachael Marzion	Inspection Start Date:	6/19/2018		
		Inspection End Date:	6/19/2018		
Inspection Report Pr	epared By: Jesse Sanchez	Date Report Prepared:	9/10/2020		
Internal Technical Ro	eview (for Periodic Inspections) By: John Conway, I	P.E., SPN Levee Safety Program Manager Date of ITR:			
Final Approved By:	Susan Kelly, P.E., SPN Levee Safety Officer	Date Approved:			
Type of Inspection:	Initial Eligibility Inspection	Overall Segment / System Rating: Acceptable			
	Continuing Eligibility Inspection (Routine)	Minimally Accepta	able		
Contents of Report:	Continuing Eligibility Inspection (Periodic)	Note: In addition to the report contents indicated here, a plan	view drawing of the		
1	Initial Eligibility Inspection	system, with stationing, should be included with this report to	reference locations of		
	General Items for All Flood Control Works	items rated less than acceptable. Photos of general system con deficiencies should also be attached.	dition and any noted		
	Levee Embankment	Note: This inspection rating represents the Corps evaluation of			
	Concrete Floodwalls	maintenance of the flood damage reduction system and may be other information for a levee certification determination for Na			
	Sheet Pile and Concrete I-walls Program (NFIP) purposes if applicable. An Acceptable Corps inspection rating, alone,				
	Interior Drainage System 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				
	FDR System Channels	by the levee owner to determine the potential impacts to the ce	rtification for FEMA.		

SPN Levee Safety Officer Approval Signature

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:

Teriti el Teli el titte Terre esti en	Continuing Eligibility Inspections		
Initial 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	A flood damage reduction system is made up of one or more flood damage	A flood damage reduction segment is defined as a discrete
or more flood damage reduction systems which were	5 51 5	portion of a flood damage reduction system that is operated and
under the same authorization.	defined area. Failure of one segment within a system constitutes failure of the	maintained by a single entity. A flood damage reduction
	entire system. Failure of one system does not affect another system.	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	Protected population in the range	Greater than 20 households per square mile; major industrial areas with significant infrastructure investment.
households per square mile protected.	of 6 to 20 households per square	Some protected urban areas have no permanent population but may be industrial areas with high value
	mile protected.	infrastructure with no overnight population.



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB (ALLB) 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.



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB (ALLB) General Instructions Page 2 of 3

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.	





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)				
Alameda Creek FFCP Left Bank ALLB for CESPN				
2. Reporting period: (month/day/year to month/day/year)				
June 19, 2017 to June 19, 2018				
3. Summary of maintenance required by last inspection report:				
Normal program maintenance.				
4. Summary of maintenance performed this reporting period:				
Supplemental O&M manual with updates prepared.				
5. Summary of maintenance planned next reporting period:				
Normal annual program maintenance.				
6. Summary of changes to segment / system since last inspection:				
None.				
7. Problems/ issues requiring the assistance of the US Army Corps of Engineers:				
None.				



Public Sponsor Pre-Inspection Report The following information is to be provided by the levee district sponsor prior to an inspection

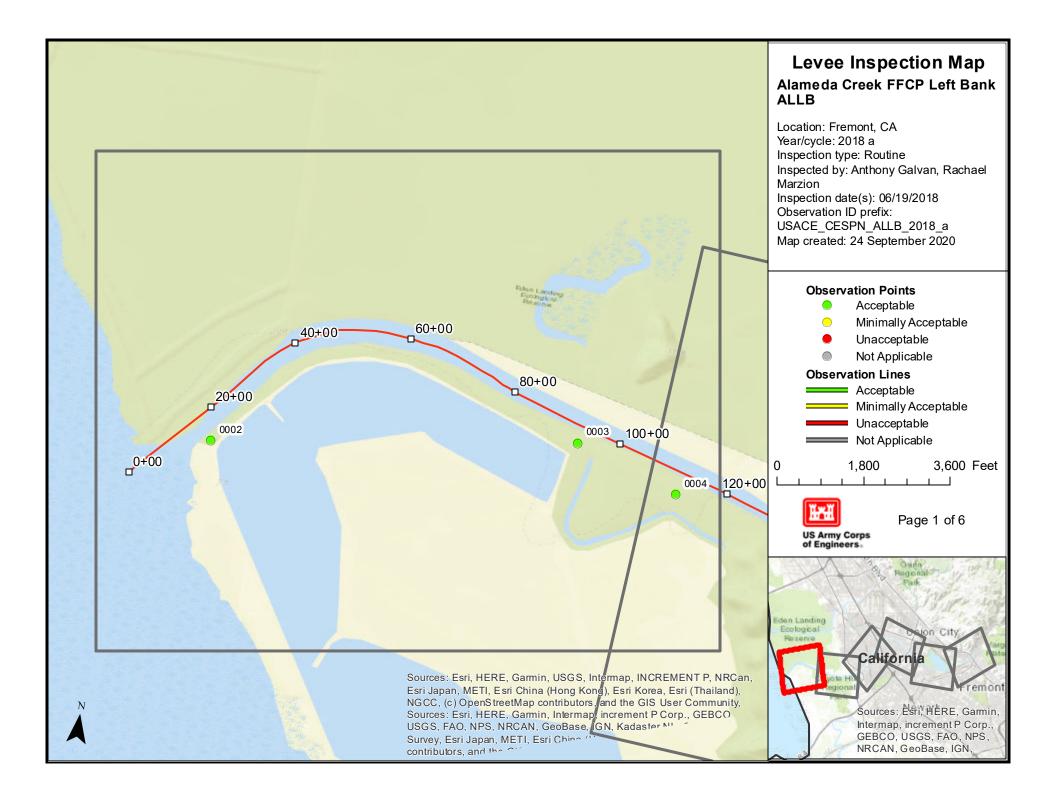
Name	Position	Mailing Address	Phone Number	Email Address
Greg Leonard	Public Works Inspector III	951 Turner Ct., Hayward CA 94545	(510) 670 - 6561	gregl@acpwa.org
Robert Brown	Public Works Inspector III	951 Turner Ct., Hayward CA 94545	(510) 670 - 5730	robertb@acpwa.org

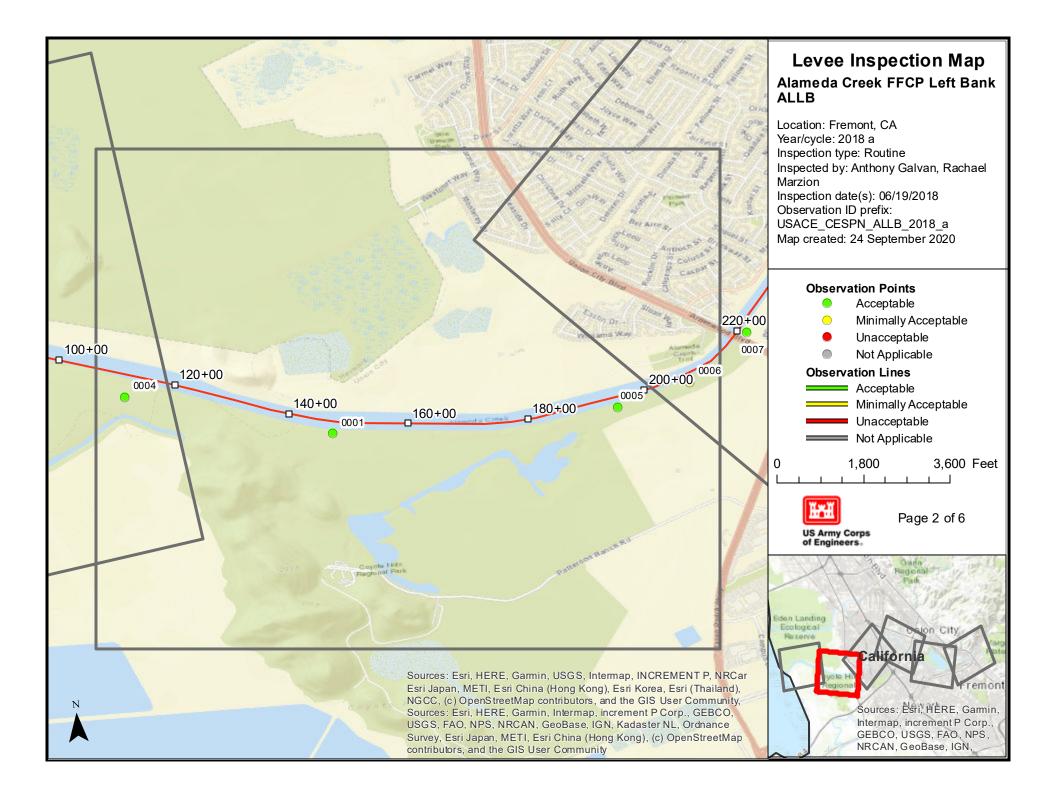
8. Levee district organization: (elected or appointed levee district officials and key employees)

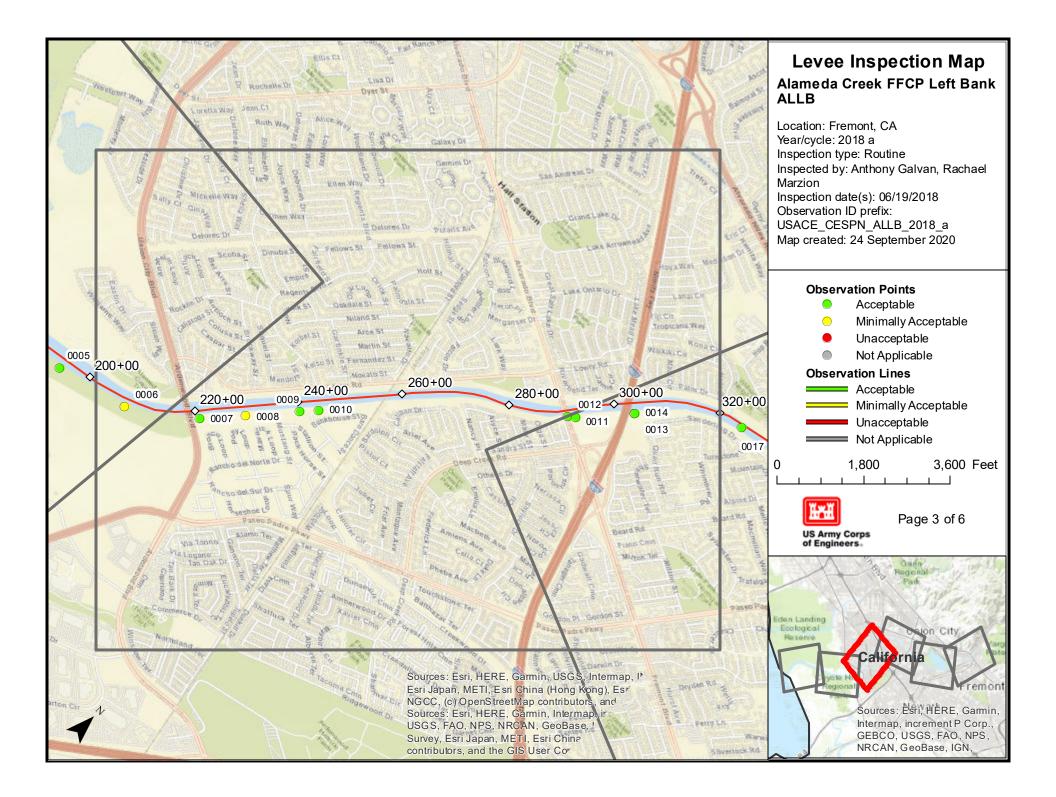


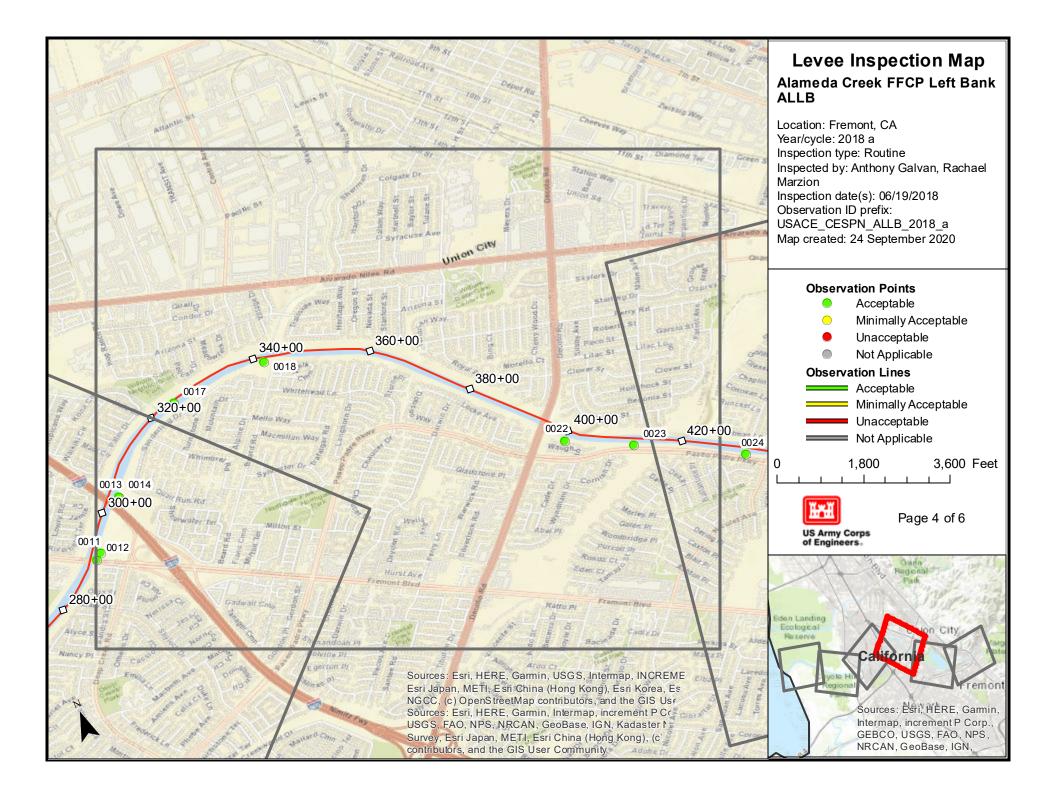
Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB

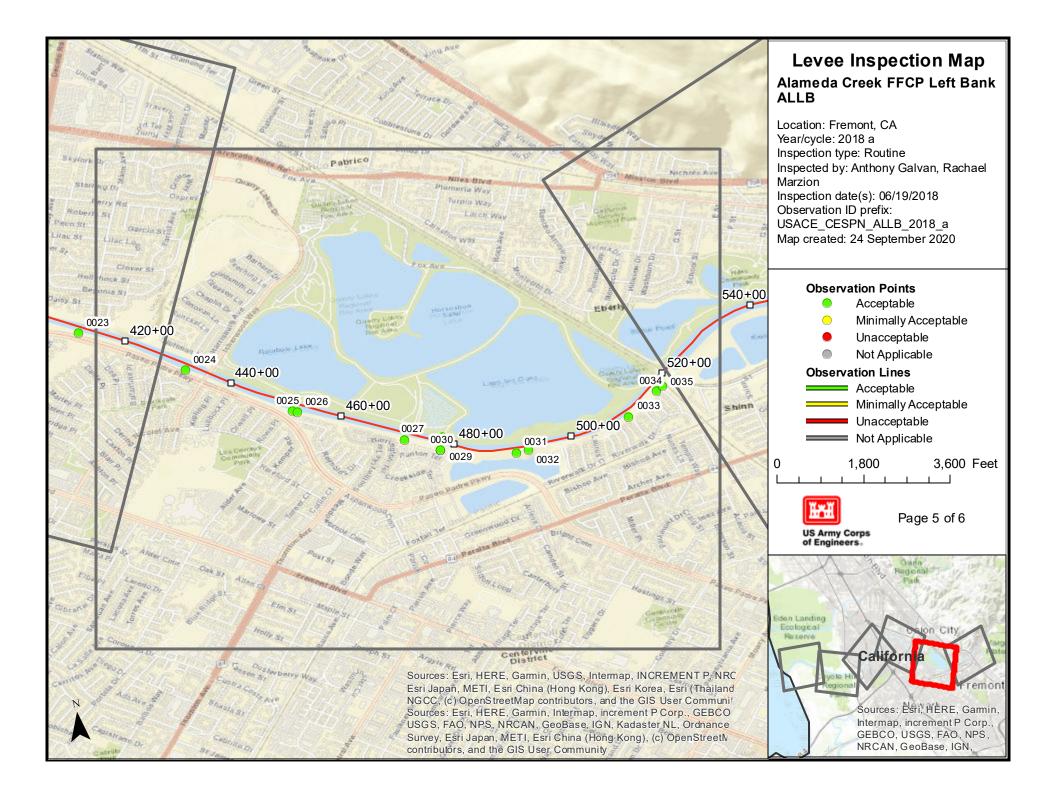
Pre-Inspection Form Page 2 of 2

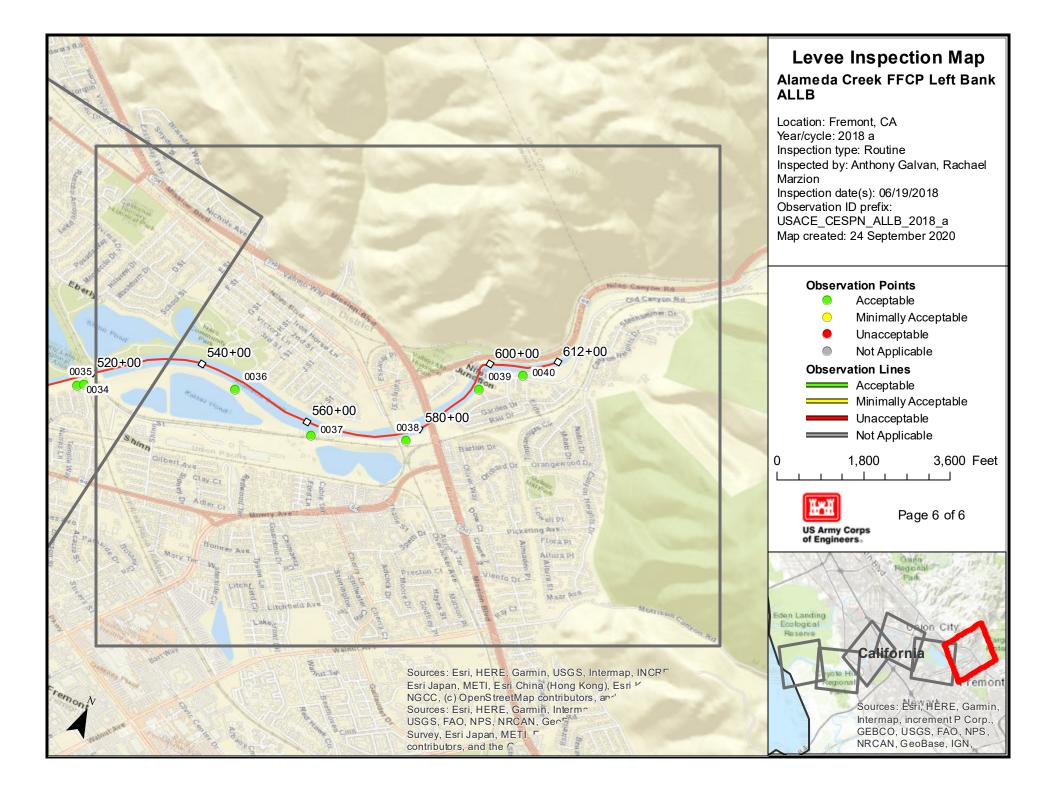












General Items for All Flood Damage Reduction Segments / Systems

	Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
1.	Operations and Maintenance Manuals	Μ	A	Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	The sponsor has an O&M manual dated March 2017. It is recommended that the O&M manual be updated to include the new access ramp at Station 221+00 and the concrete
			М	Sponsor manuals are lost or missing or out of date; however, sponsor will obtain manuals prior to next scheduled inspection.	staircase at Station 326+00.
			U	Sponsor has not obtained lost or missing manuals identified during previous inspection.	
2.	Emergency Supplies and Equipment	Α	Α	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.	Loaders, bulldozers and backhoes, sandbags, water-filled flood barriers, and stockpiles of sand are available during emergency event. Access to additional heavy machinery is
	(A or M only)		М	The sponsor does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	also available in eastern Alameda County.
3.	Flood Preparedness and Training (A or M only)	Α	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.	the O&M manual. The sponsor representative stated that their flood fighting crew attends a "Flood Fight Methods" course administered by the California Department of Water
			М	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.	Resources (DWR) every two years.

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

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB General Items for All Flood Damage Reduction Segments / Systems Page 1 of 1

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

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations		
 Unwanted Vegetation Growth¹ 	Μ	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	ALLB_2018_a_0004: Station_1 112+00: Typical levee cross-section.: NA (A) ALLB_2018_a_0006: Station_1 208+00: Trees more than 10 ft tall were observed within the 15 ft vegetation-free zone. Typical condition.: The trees should be managed in			
		М	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.	accordance with ETL 1110-2-583 or a vegetation variance should be obtained. (M) ALLB_2018_a_0008: Station_1 230+00: Trees more than 10 feet tall and with trunk diameters greater than 12 inches		
		U	Significant vegetation growth (brush, weeds, or any trees greater than 2 inches in diameter) is present within the zones described above and must to be removed to reestablish or ascertain levee integrity.	10 feet tall and with trunk diameters greater than 12 inches were observed on the landside slope.: The trees should be managed in accordance with ETL 1110-2-583 or a vegetation variance should be obtained. (M)		
2. Sod Cover	Α	Α	There is good coverage of sod over the levee.	The sod coverage was in good condition during the time of		
		М	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.	the inspection.		
		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	Μ	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.	ALLB_2018_a_0009: Station_1 240+00: Residential buildings and a concrete walkway access path.: NA (M)		
		М	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.			
 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.	There are no closure structures along the project segment.		

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Levee Embankments Page 1 of 5

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)			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	Α	Α	No slides, sloughs, tension cracking, slope depressions, or bulges are present.	No slides or slope instability were observed along the project		
		М	Minor slope stability problems that do not pose an immediate threat to the levee embankment.	segment during the inspection.		
		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	M	А	No erosion or bank caving is observed on the landward or riverward sides of the levee that might endanger its stability.	ALLB_2018_a_0017: Station_1 325+00: Pioneer trails observed on both sides of the concrete stairs. Path on the		
		М	There are areas where minor erosion is occurring or has occurred on or near the levee embankment, but levee integrity is not threatened.	north side of the staircase is a possible remnant of an erosion rill.: NA (M) ALLB_2018_a_0029: Station_1 478+00: Left bank under		
			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.	the bridge.: NA (M)		
7. Settlement ²	A	А	No observed depressions in crown. Records exist and indicate no unexplained historical changes.	No levee crest settlement was observed along the project segment during the time of the inspection.		
		М	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	Α	Α	Α	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.	No depressions or rutting were observed along the project segment during the time of the inspection.
		М	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	Α	А	Minor longitudinal, transverse, or desiccation cracks with no vertical movement along the crack. No cracks extend continuously through the levee crest.	Some minor longitudinal cracking observed in the asphalt access road along the levee crest near Station 300+00		
		М	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.			

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Levee Embankments Page 2 of 5

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

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	Μ	A	Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.	ALLB_2018_a_0010: Station_1 244+00: Animal burrow activity observed on the landside levee prism extending	
		М	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.	approximately 10 x 30 ft along the top of the slope.: Monitor the area and continue with animal abatement program.(M) ALLB_2018_a_0022: Station_1 400+00: 3 - 4 large animal burrows approximately 8 feet wide were observed near the top	
		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.	of the waterside slope. Riprap displacement along the waterside slope.: Continue with animal abatement program. Regrade slope back to lines and grades in the O&M manual and restore displaced riprap. (M)	
11. Culverts/ Discharge Pipes ³ (This item includes both concrete and corrugated metal pipes.)	Α	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.	ALLB_2018_a_0003: Station_1 93+00: Pump station and outflow culvert from the Cargill facilities.: NA (A) ALLB_2018_a_0018: Station_1 342+00: 24-inch CMP with a duckbill attachment in good condition.: NA (A) ALLB_2018_a_0030: Station_1 478+00: Culvert on waterside slope in good condition.: NA (A) ALLB_2018_a_0032: Station_1 492+00: Reinforced	
			repaired, but the entire length of pipe is still structurally sou collapsing. Pipe shape may be ovalized in some locations be approaching a curvature reversal. A limited number of join may be beginning. Any open joints should be repaired prio Corrugated metal pipes, if present, may be showing corrosis areas with total section loss. Condition of pipes has been ve	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.	concrete pipe in good condition.: NA (A) ALLB_2018_a_0033: Station_1 510+00: 30-inch flap gate and surrounding concrete apron in good condition.: NA (A) ALLB_2018_a_0035: Station_1 518+00: Concrete outlet structure in good condition.: NA (A) ALLB_2018_a_0036: Station_1 547+00: Fish screen on the waterside slope.: NA (A) ALLB_2018_a_0037: Station_1 561+00: Alameda County Water District structure not in service.: NA (A)
		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 &	Α	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.	ALLB_2018_a_0005: Station_1 195+00: The riprap on the channel side slope was in good condition.: NA (A)	

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Levee Embankments Page 3 of 5

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

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
Bank Protection		М	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	Α	Α	Existing revetment protection is properly maintained, undamaged, and clearly visible.	ALLB_2018_a_0023: Station_1 412+00: Grouted stone slope protection was in good condition.: NA (A)
1 1		М	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.	ALLB_2018_a_0024: Station_1 432+00: Grouted stone slope protection was in good condition.: NA (A) ALLB_2018_a_0025: Station_1 452+00: Grouted stone
		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.	slope protection was in good condition.: NA (A) ALLB_2018_a_0027: Station_1 472+00: Grouted stone slope protection in good condition.: NA (A)
		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.	There are no relief wells/toe drainage systems along the project segment,
		М	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	Α	Α	No evidence or history of unrepaired seepage, saturated areas, or boils.	No evidence of seepage was observed during the time of the
	_	М	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.	inspection. No seepage issues have been reported by the sponsor.
		U	Evidence or history of active seepage, extensive saturated areas, or boils.	

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Levee Embankments Page 4 of 5

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

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.

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Levee Embankments Page 5 of 5

	Inspections of interior drainage systems

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
1. Vegetation and Obstructions	Α	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.	Minor sedimentation buildup in front of the flap gate outlets at Station 221+00. See item 11 in Interior Drainage System checklist.
			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	Α		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.	No trash, debris, or unauthorized structures were present in the Interior Drainage System during the time of the inspection.
			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	Α	No trash, debris, structures, or other obstructions present within the ponding areas. Sediment deposits do not exceed 10% of capacity.	There are no ponding areas associated with the interior drainage system.
		М	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.	
			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.	
 Fencing and Gates¹ 	Α	Α	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.	All fencing associated with the interior drainage system was in good condition.
			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	Α	Α	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.	ALLB_2018_a_0014: Station_1 304+00: Cracking observed on the corner of the slide gate's concrete base approximately

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



For use during Initial and Continuing Eligibility Inspections of interior drainage systems

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
wells, outfalls, intakes, or culverts)		М	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.	1/4-inch-wide.: NA (A)
		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	Α	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	No evidence was observed that would indicate significant areas of tilting, sliding, or settlement.
Concrete and Sheet Pile Structures ² (Such as gate wells, outfalls,		М	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.	
intakes, or culverts)		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	Α	Α	No active erosion, scouring, or bank caving that might endanger the structure's stability.	No evidence was observed that would indicate active
Concrete Structures ³ (Such as culverts, inlet and discharge structures, or		М	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 stabile until the next inspection.	erosion, scouring, or bank caving.
gatewells.)		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	Α	Α	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.	All monolith joints were observed to be in good condition.
		М	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.	

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Interior Drainage System Page 2 of 5

For use during Initial and Continuing Eligibility Inspections of interior drainage systems

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
			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	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.	See item 11 in the Levee Embankments section of this report.
			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.	
			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.	
 Sluice / Slide Gates⁵ 	Α		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.	ALLB_2018_a_0001: Station_1 148+00: The four 48-inch slide gates were in good condition and clear of debris. The duckbill valves on the channel side appeared to be in good condition.: NA (A)
			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.	ALLB_2018_a_0011: Station_1 292+00: NA: NA (A) ALLB_2018_a_0013: Station_1 304+00: Slide gate in good condition. Minor debris observed in the well.: Clear debris from the well. (A)
			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.	nom the went. (A)
		N/A	There are no sluice/ slide gates.	

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Interior Drainage System Page 3 of 5

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
11. Flap Gates/ Flap Valves/	Α	A	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	ALLB_2018_a_0007: Station_1 221+00: Sediment buildup in front of 2 of the 8 flap gate outlets. Joint separation
Pinch Valves ¹		М	Gates/ valves will not fully open or close because of obstructions that can be easily removed, or have minor corrosion damage that requires maintenance.	observed in the concrete apron. Minor corrosion observed on the flap gates. Outlets are clear of debris.: Monitor sediment accumulation around the outlets and repair joint
		U	Gates/ valves are missing, have been damaged, or have deteriorated to the point that they need to be replaced.	material. (A) ALLB_2018_a_0012: Station_1 291+00: 30-inch flap gate and surrounding concrete apron in good condition.: NA (A)
		N/A	There are no flap gates.	
12. Trash Racks (non-mechanical)	NA	Α	Trash racks are fastened in place and properly maintained.	There are no trash racks present along the project segment.
		М	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	Α	A	All metal parts are protected from corrosion damage and show no rust, damage, or deterioration that would cause a safety concern.	The other metallic items were in good condition.
		М	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	Α	Α	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.	The riprap was in good condition during the time of the inspection.
Areas		М	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	Α	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.	There are no such revetments protecting this feature of the system.

For use during Initial and Continuing Eligibility Inspections of interior drainage systems

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Interior Drainage System Page 4 of 5

For use during Initial and Continuing Eligibility Inspections of interior drainage systems

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
			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.	
			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.

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Interior Drainage System Page 5 of 5

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	А	A	No obstructions, vegetation, debris, or sediment accumulation within the channel. Concrete channel joints and weep holes are free of grass and weeds.	ALLB_2018_a_0038: Station_1 577+00: Active construction in the channel of the project segment.: NA (A)				
		М	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.	ALLB_2018_a_0040: Station_1 606+00: Upstream end of the project segment.: NA (A)				
		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.					
2. Shoaling ¹	Μ	Α	No shoaling or minor, non-vegetated shoaling is present.	A vegetated shoal was observed in the channel at Station				
(sediment deposition)		М	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.	258+00. The shoal should be removed absent analysis demonstrating that hydraulic capacity is otherwise maintained.				
		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.					
3. Encroachments	А	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.	The rubber dam at Station 570+00 was in good condition.				
		М	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.					
4. Erosion	Α	Α	No head cutting or horizontal deviation observed.	ALLB_2018_a_0028: Station_1 478+00: Typical channe conditions for the project segment.: NA (A)				
						М	Head cutting and horizontal deviation evident, but is less than 1 foot from the designed grade or cross section.	ALLB_2018_a_0039: Station_1 594+00: Old Canyon Bridge:: NA (A); No erosion or head cutting was observed
		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.	within the channel during the time of the inspection.				
5. Concrete Surfaces	А	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.	ALLB_2018_a_0031: Station_1 491+00: The grade control structure was in good condition.: NA (A)				
			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.	ALLB_2018_a_0034: Station_1 517+00: Bart crossing area. Riprap in channel in good condition. Minor debris related damage observed on baffle blocks.: NA (A)				

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Flood Damage Reduction Channels Page 1 of 4

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

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
		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	Α	A	There are no significant areas of tilting, sliding, or settlement that would endanger the integrity of the structure.	No significant areas of tilting, sliding, or settlement for the concrete structures along the channel were observed during
Concrete Structures ²		М	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.	the inspection.
		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	Α	Α	No active erosion, scouring, or bank caving that might endanger the structure's stability.	No bank caving, scouring, or erosion was observed near the
Concrete Structures ³		М	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 stabile until the next inspection.	concrete structures during the time of the 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.	
 Slab and Monolith Joints 	Α	Α	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.	Slab and joint material were in good condition during the inspection.

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Flood Damage Reduction Channels Page 2 of 4

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

Rated Item	Rating		Rating Guidelines	Location/Remarks/Recommendations
		М	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/	Α	Α	Gates/ valves open and close easily with minimal leakage, have no corrosion damage, and have been exercised and lubricated as required.	ALLB_2018_a_0026: Station_1 453+00: Flap gate and outlet structure in good condition.: NA (A)
Pinch Valves ⁴		М	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 &	Α	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.	The riprap was in good condition during the time of the inspection.
Banks		М	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	NA	Α	Existing revetment protection is properly maintained, undamaged, and clearly visible.	No revetments other than riprap present along the project
than Riprap		М	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.	segment.
		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.	

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Flood Damage Reduction Channels Page 3 of 4

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

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.

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



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Flood Damage Reduction Channels Page 4 of 4

Flood Damage Reduction Segment / System Supplemental Data Sheet

This form is intended for the Corps' internal use and may not need to be updated with every inspection.

Name of Segment / System: Alameda Creek FFCP Left Bank ALLB	
Sponsor: Alameda County Flood Control and Water Conservation District	
Location: Fremont, CA	
River Basin: Arroyo Del Valle, Arroyo de la Laguna, Alameda Creek	
Project Description: The project is approximately 12 miles of levee and incised earthen channel with grouted rock sills, a concrete grade control structure and inflatable rubber dams.	
Authority that Project was Constructed Under: Alameda Creek Improvement in the Coastal Plain in the Flood Control Act of 1962, Public Law 87-874 as part of the Alameda Creek Flood Control Project.	
Date of Construction: 6/1/1977	
Approximate Annual Maintenance Costs:	
Construction: Federally Constructed Non-Federally Constructed	
Maintenance: Federally Maintained Non-Federally Maintained	
National Flood Insurance Program:	
a. Is the project currently NFIP? Xes No	
b. If in the NFIP, Date of Certification (per 44 CFR 65.10):	
Datum Information:	
a. Datum used for the design and construction of this project is: MSW	
b. Current recommended datum for this project is: NAVD-88	
c. Has the Project been converted to the current recommended datum? 🗌 Yes 🛛 No	
Levee Embankment Data:	Protected Features (For use in preparing estimates and PIRs):
a. Levee Designed Gage Function Reading/Station: USGS Alameda Cr. at Niles	a. Total acres protected:
b. Level of Protection Provided:	b. Total agriculture production acres protected:
c. Average Height of Levee: 15 feet	c. Towns:
d. Average Crown Width: 12 feet	d. Businesses:
e. Average Side Slope: 1V : 2.5H	e. Residences:
	f. Roads:
	g. Utilities:
	h. Barns:
	i. Machine Sheds:
	j. Outbuildings:
	k. Irrigation Systems:
	1. Grain Bins:
	m. Other Facilities:



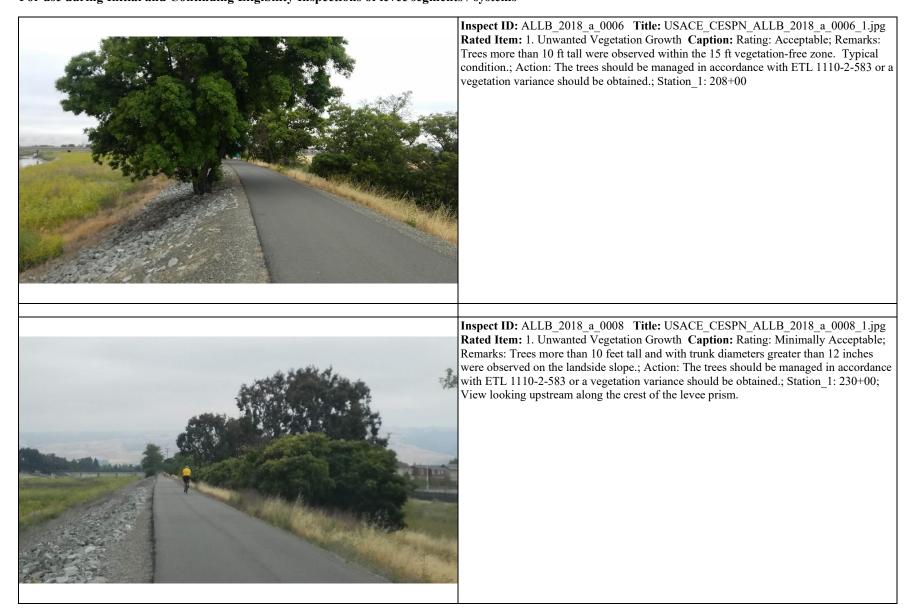
For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 1 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 2 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 3 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 4 of 21

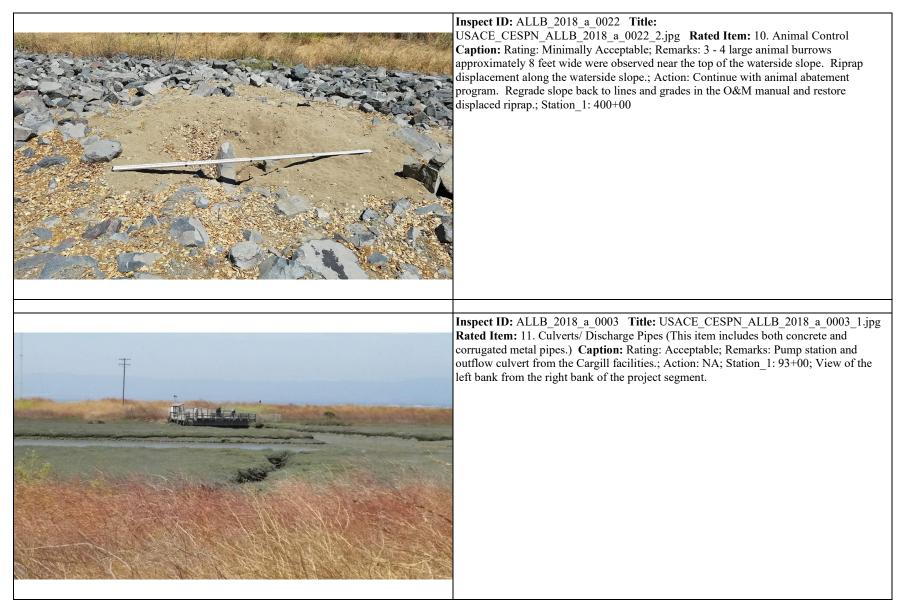
For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 5 of 21

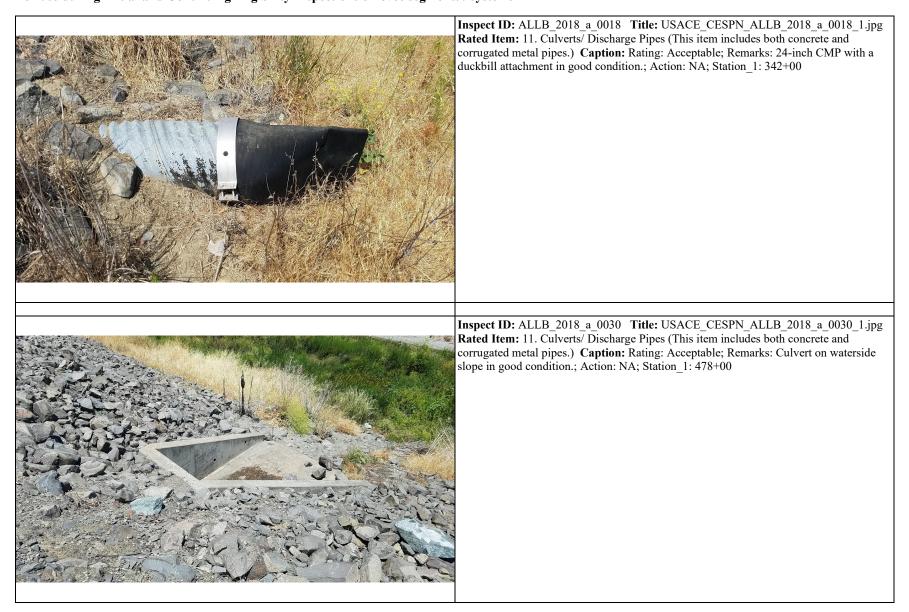
For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 6 of 21

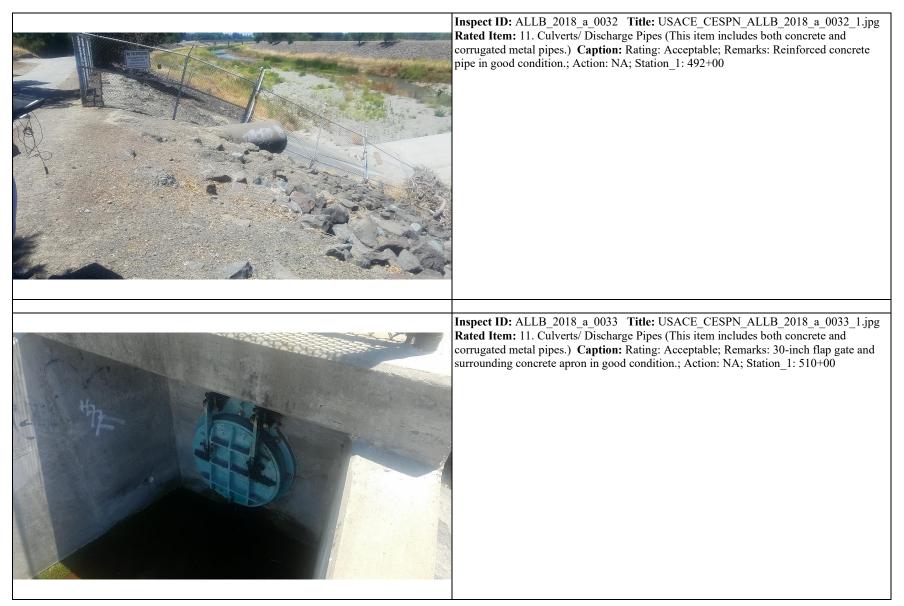
Photos For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 7 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 8 of 21

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

Inspect ID: ALLB_2018_a_0035 Title: USACE_CESPN_ALLB_2018_a_0035_1.jpg Rated Item: 11. Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.) Caption: Rating: Acceptable; Remarks: Concrete outlet structure in good condition.; Action: NA; Station_1: 518+00
Inspect ID: ALLB_2018_a_0036 Title: USACE_CESPN_ALLB_2018_a_0036_1.jpg Rated Item: 11. Culverts/ Discharge Pipes (This item includes both concrete and corrugated metal pipes.) Caption: Rating: Acceptable; Remarks: Fish screen on the waterside slope.; Action: NA; Station_1: 547+00



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 9 of 21

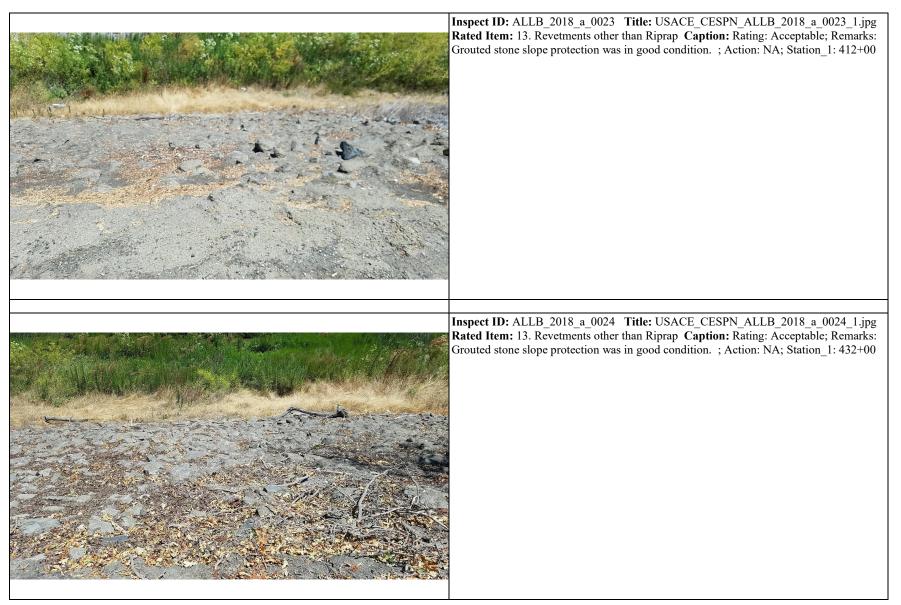
For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 10 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 11 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 12 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 13 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 14 of 21

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

Inspect ID: ALLB_2018_a_0013 Title: USACE_CESPN_ALLB_2018_a_0013_1.jpg Rated Item: 10. Sluice/ Slide Gates Caption: Rating: Acceptable; Remarks: Slide gate in good condition. Minor debris observed in the well.; Action: Clear debris from the well. ; Station_1: 304+00
Inspect ID: ALLB_2018_a_0013 Title: USACE_CESPN_ALLB_2018_a_0013_2.jpg Rated Item: 10. Sluice/ Slide Gates Caption: Rating: Acceptable; Remarks: Slide gate in good condition. Minor debris observed in the well.; Action: Clear debris from the well. ; Station_1: 304+00



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 15 of 21

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

Inspect ID: ALLB_2018_a_0007 Title: USACE_CESPN_ALLB_2018_a_0007_1.jpg Rated Item: 11. Flap Gates/ Flap Valves/ Pinch Valves Caption: Rated Item: 10. Sluice/ Slide Gates; Rating: Acceptable; Remarks: Sediment buildup in front of 2 of the 8 flap gate outlets. Joint separation observed in the concrete apron. Minor corrosion observed on the flap gates. Outlets are clear of debris.; Action: Monitor sediment accumulation around the outlets and repair joint material.; Station_1: 221+00
Inspect ID: ALLB_2018_a_0012 Title: USACE_CESPN_ALLB_2018_a_0012_1.jpg
Rated Item: 11. Flap Gates/ Flap Valves/ Pinch Valves Caption: Rating: Acceptable; Remarks: 30-inch flap gate and surrounding concrete apron in good condition.; Action: NA; Station_1: 291+00



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 16 of 21

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

	Inspect ID: ALLB_2018_a_0038 Title: USACE_CESPN_ALLB_2018_a_0038_1.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Acceptable; Remarks: Active construction in the channel of the project segment.; Action: NA; Station_1: 577+00
<image/>	Inspect ID: ALLB_2018_a_0038 Title: USACE_CESPN_ALLB_2018_a_0038_2.jpg Rated Item: 1. Vegetation and Obstructions Caption: Rating: Acceptable; Remarks: Active construction in the channel of the project segment.; Action: NA; Station_1: 577+00



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 17 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 18 of 21

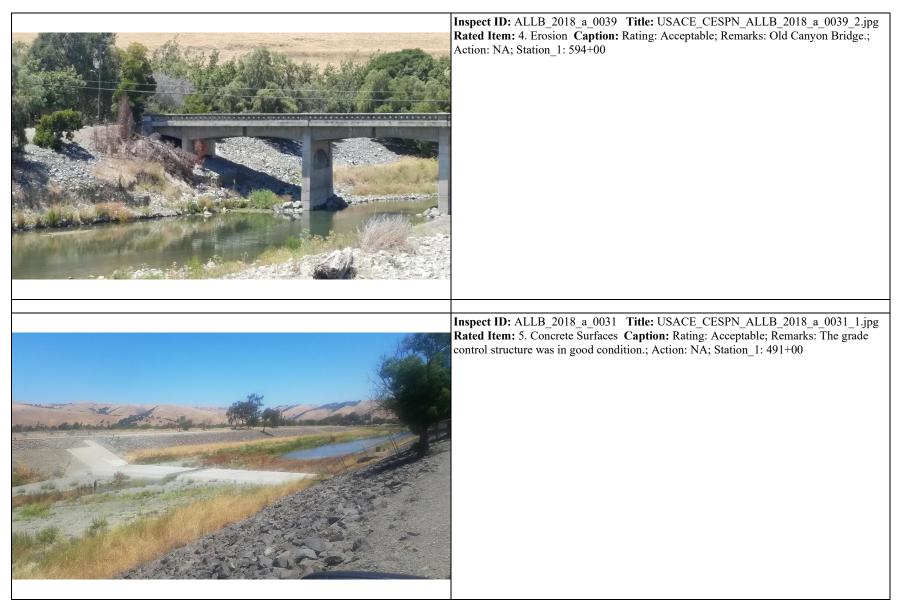
For use during Initial and Continuing Eligibility Inspections of levee segments / systems





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 19 of 21

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





Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 20 of 21

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

Inspect ID: ALLB_2018_a_0034 Title: USACE_CESPN_ALLB_2018_a_0034_1.jpg Rated Item: 5. Concrete Surfaces Caption: Rating: Acceptable; Remarks: Bart crossing area. Riprap in channel in good condition. Minor debris related damage observed on baffle blocks.; Action: NA; Station_1: 517+00
Inspect ID: ALLB_2018_a_0026 Title: USACE_CESPN_ALLB_2018_a_0026_1.jpg Rated Item: 9. Flap Gates/ Flap Valves/ Pinch Valves Caption: Rating: Acceptable; Remarks: Flap gate and outlet structure in good condition.; Action: NA; Station_1: 453+00



Flood Damage Reduction Segment / System Inspection Report Alameda Creek FFCP Left Bank ALLB Photos Page 21 of 21