

Appendix G: Inspection Category Rating Descriptions

Table G-1: Levee Inspection Rating Categories

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Earthen Levee	Animal Control	A	A1	Rodent holes have been backfilled in a manner that adequately addresses the void created in the levee. A continuous animal burrow control program is in place that includes elimination of active burrowing and the filling of existing burrows. Less than 5 holes (holes that penetrate the levee prism more than 6") in any 25' length of levee, and less than 2 cubic feet of material observed beside any hole. All holes are less than 6" in diameter.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	M	A1	Either more than 5 holes were observed in a 25' length of levee or at least one hole greater than 6" in diameter was observed. No rodent activity was observed on opposing slope and holes penetrate the levee prism more than 6".	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	U	A1	More than 2 cubic feet of material was observed beside at least one hole. Either 5 or more holes were observed in a 25' length of levee or a hole 6" in diameter or more was observed with rodent activity on the opposing slope. Holes penetrate the levee prism more than 6".	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	W	A1	The animal burrow control program has produced results per the standard, but the area should be monitored and the control program continued to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	C	A1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	A	A2	Rodent holes have been backfilled in a manner that adequately addresses the void created in the levee. A continuous animal burrow control program is in place that includes elimination of active burrowing and the filling of existing burrows. Less than 5 holes (holes that penetrate the levee prism more than 6") in any 25' length of levee, and less than 2 cubic feet of material observed beside any hole. All holes are less than 6" in diameter.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	M	A2	Either more than 5 holes were observed in a 25' length of levee or at least one hole greater than 6" in diameter was observed. No rodent activity was observed on opposing slope and holes penetrate the levee prism more than 6".	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	U	A2	More than 2 cubic feet of material was observed beside at least one hole. Either 5 or more holes were observed in a 25' length of levee or a hole 6" in diameter or more was observed with rodent activity on the opposing slope. Holes penetrate the levee prism more than 6".	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	W	A2	The animal burrow control program has produced results per the standard, but the area should be monitored and the control program continued to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	C	A2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	A	A3	Rodent holes have been backfilled in a manner that adequately addresses the void created in the levee. A continuous animal burrow control program is in place that includes elimination of active burrowing and the filling of existing burrows. Less than 5 holes (holes that penetrate the levee prism more than 6") in any 25' length of levee, and less than 2 cubic feet of material observed beside any hole. All holes are less than 6" in diameter.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	M	A3	Either more than 5 holes were observed in a 25' length of levee or at least one hole greater than 6" in diameter was observed. No rodent activity was observed on opposing slope and holes penetrate the levee prism more than 6".	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	U	A3	More than 2 cubic feet of material was observed beside at least one hole. Either 5 or more holes were observed in a 25' length of levee or a hole 6" in diameter or more was observed	Maintenance Deficiency	Maintenance Deficiency

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				with rodent activity on the opposing slope. Holes penetrate the levee prism more than 6".		
Earthen Levee	Animal Control	W	A3	The animal burrow control program has produced results per the standard, but the area should be monitored and the control program continued to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Animal Control	C	A3	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Closure Structures	A		Closure structure in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components of closure clearly marked and installation instructions / procedures readily available. Trial erections have been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Closure Structures	U		Closure structure in poor condition. Parts missing or corroded. Placing equipment may not be available within normal warning time. Trial erections have not been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Closure Structures	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Cracking	A	CR1	No cracks were observed that are present year round that are greater than 2" deep and transverse more than 1/3 of the levee crown or longitudinal length with a length of 1/3 the height of the levee .	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	M	CR1	Cracks were observed that are between 2" and 6" deep, transverse between 1/3 and the full levee crown width, or have a longitudinal length of between 1/3 and the full height of the levee.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	U	CR1	Cracks were observed that are 6" or deeper, have transverse cracks extending the entire levee width, or have a longitudinal length greater than the height of the levee. Signs of vertical movement may have been observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	W	CR1	No cracks were observed that violate standards, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	C	CR1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	A	CR2	No cracks were observed that are present year round that are greater than 2" deep and transverse more than 1/3 of the levee crown or longitudinal length with a length of 1/3 the height of the levee .	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	M	CR2	Cracks were observed that are between 2" and 6" deep, transverse between 1/3 and the full levee crown width, or have a longitudinal length of between 1/3 and the full height of the levee.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	U	CR2	Cracks were observed that are 6" or deeper, have transverse cracks extending the entire levee width, or have a longitudinal length greater than the height of the levee. Signs of vertical movement may have been observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	W	CR2	No cracks were observed that violate standards, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Cracking	C	CR2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Crown Surface / Depressions / Rutting	A	C1	The crown is at or above the design elevation.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Crown Surface / Depressions / Rutting	M	C1	Sections of the crown have settled below the design elevation for distances less than 100'.	Maintenance Deficiency	Design & System Obsolescence

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Earthen Levee	Crown Surface / Depressions / Rutting	U	C1	Sections of the crown have settled below the design elevation for distances greater than 100'.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Crown Surface / Depressions / Rutting	W	C1	Sections of the crown may have settled below the design elevation and may need maintenance in the future.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Crown Surface / Depressions / Rutting	C	C1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Crown Surface / Depressions / Rutting	A	C2	There are no ruts, pot holes, or other depressions on the levee crown or embankments. The levee crown and access roads are well established and drain properly without any ponded water.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	M	C2	Some ruts, holes, settlement or other depressions on the levee less than 6" deep were observed.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	U	C2	There are depressions greater than 6" deep that will pond water or a large amount of additional road material is needed to ensure all-weather access. The levee may have settled below the design elevation for a distance greater than 100'.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	W	C2	The crown surface complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	C	C2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	A	C3	The road is in all-weather condition and drain properly without any ponded water.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	M	C3	The all-weather surface requires some maintenance but will not prevent access during the coming flood season.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	U	C3	The all-weather surface will not able to be used during the coming flood season. Material should be added or the roadway re-graded before the next flood season.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	W	C3	The crown surface complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Crown Surface / Depressions / Rutting	C	C3	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Emergency Supplies & Equipment	A		The LMA maintains a stockpile of sandbags, shovels, and other flood fight supplies from a centralized location which will adequately supply all needs for the initial days of a flood fight. The LMA determines the required quantity of supplies after consulting with inspector.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Emergency Supplies & Equipment	M		The LMA does not maintain an adequate supply of flood fighting materials as part of their preparedness activities.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Encroachments	A	AD	The ditch within the landside easement appears to be maintained per permit conditions and does not appear to create a slope instability or inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	AD	An ditch blocking visibility or access along the levee or within the landside easement were observed but will not inhibit slope stability or operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	AD	An ditch blocking visibility or access along the levee or within the landside easement were observed that may inhibit slope stability or operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	AD	No ditch was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence

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Earthen Levee	Encroachments	C	AD	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	AT	The levee and soil along the levee or within the landside easement is not being disced or tilled.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	AT	Evidence of or active discing or tilling along the levee or within the landward easement was observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	AT	Evidence of or active discing or tilling along the levee or within the landside easement was observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	AT	Evidence of past active discing or tilling along the levee, within the landside easement, or nearby was observed that should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	AT	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	AV	No abandoned vehicles blocking visibility or access along the levee or within the landside easement were observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	AV	Abandoned vehicles blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	AV	Abandoned vehicles blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	AV	No vehicles were observed, but have been in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	AV	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	BU	Buildings along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	BU	A building blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	BU	A building blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	BU	No building was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	BU	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	CR	No agricultural crops or related features blocking visibility or access along the levee or within the landside easement were observed.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	CR	Agricultural crops or related features blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	CR	Agricultural crops or related features blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	CR	Agricultural crops or related features were observed, but have been observed in the past and	Enforcement	Design & System

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				the location should be monitored.		Obsolescence
Earthen Levee	Encroachments	C	CR	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	DE	No trash or debris blocking visibility or access along the levee or within the landside easement were observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	DE	Trash or debris blocking visibility and access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	DE	Trash or debris blocking visibility and access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	DE	No trash or debris were observed, but has been in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	DE	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	EQ	No construction or agricultural equipment blocking visibility or access along the levee or within the landside easement was observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	EQ	Construction or agricultural equipment blocking visibility and access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	EQ	Construction or agricultural equipment blocking visibility and access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	EQ	No construction or agricultural equipment were observed, but has been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	EQ	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	FE	Fences along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	FE	Fences blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	FE	Fences blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	FE	No fence was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	FE	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	FW	No firewood blocking visibility or access was along the levee or within the landside easement observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	FW	Firewood blocking visibility and access along the levee or within the landside easement was observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	FW	Firewood blocking visibility and access along the levee or within the landside easement was observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	FW	No firewood was observed, but has been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency

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Earthen Levee	Encroachments	C	FW	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	GA	No trash or garbage blocking visibility or access along the levee or within the landside easement was observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	GA	Trash or garbage blocking visibility and access along the levee or within the landside easement was observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	GA	Trash or garbage blocking visibility and access along the levee or within the landside easement was observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	GA	No garbage was observed, but has been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	GA	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	LI	Landscape irrigation along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	LI	Landscape irrigation blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	LI	Landscape irrigation blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	LI	No landscape irrigation was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	LI	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	MA	No material blocking visibility or access along the levee or within the landside easement was observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	MA	Material blocking visibility and access along the levee or within the landside easement was observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	MA	Material blocking visibility and access along the levee or within the landside easement was observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	MA	No material was observed, but has been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	MA	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	PI	Pipes through the levee at this location have been inspected and appear to be intact. No evidence of leakage has been observed and the pipe appears to be maintained per permit conditions.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	PI	A pipe through the levee at this location is not maintained per permit conditions or may not be authorized but will not inhibit the operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	PI	A pipe through the levee at this location is not maintained per permit conditions or may not be authorized that may inhibit the operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency

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Earthen Levee	Encroachments	W	PI	A pipe through the levee was observed that appears to be leak free and maintained per permit conditions but should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	PI	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	PO	A pole along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	PO	A pole blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	PO	A pole blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	PO	No pole was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	PO	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	PR	No prunings blocking visibility or access along the levee or within the landside easement were observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	PR	Prunings blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	PR	Prunings blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	PR	No prunings were observed, but have been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	PR	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	RA	A ramp along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	RA	A ramp blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	RA	A ramp blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	RA	No ramp was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	RA	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	SI	A sign along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	SI	A sign blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	SI	A sign blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	SI	No sign was observed, but has been observed in the past and the location should be	Enforcement	Design & System

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				monitored.		Obsolescence
Earthen Levee	Encroachments	C	SI	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	ST	No unauthorized stairways were observed along the levee or within the landside easement. Stairs found appear to be maintained per permit conditions.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	ST	A stairway on the levee or within the landside easement was observed that is not maintained per permit conditions or may not be authorized but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	ST	A stairway on the levee or within the landside easement was observed that is not maintained per permit conditions or may not be authorized that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	ST	A stairway was observed that appears to be maintained per permit conditions but should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	ST	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	TA	A tank along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	TA	A tank blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	TA	A tank blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	TA	No tank was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	TA	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	TR	No discarded tree branches or limbs blocking visibility or access along the levee or within the landside easement were observed.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	M	TR	Discarded tree branches or limbs blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	U	TR	Discarded tree branches or limbs blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	W	TR	No discarded tree branches or limbs were observed, but have been observed in the past and the location should be monitored.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	C	TR	The deficiency noted previously has been corrected.	Enforcement	Maintenance Deficiency
Earthen Levee	Encroachments	A	UR	Multiple encroachments of various types along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	UR	Multiple encroachments of various types blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Earthen Levee	Encroachments	U	UR	Multiple encroachments of various types blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	UR	Multiple encroachments of various types were not currently observed, but have been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	UR	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	A	WL	Walls along the levee or within the landside easement appear to be maintained per permit conditions and do not appear to inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	M	WL	Walls blocking visibility or access along the levee or within the landside easement were observed but will not inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	U	WL	Walls blocking visibility or access along the levee or within the landside easement were observed that may inhibit operations and maintenance or emergency operations.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	W	WL	No wall was observed, but has been observed in the past and the location should be monitored.	Enforcement	Design & System Obsolescence
Earthen Levee	Encroachments	C	WL	The deficiency noted previously has been corrected.	Enforcement	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	A	E1	No erosion greater than 3" in depth was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	M	E1	Erosion with a depth greater than 3" but less than 1' and less than 3' in length was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	U	E1	Erosion with a depth of 1' or greater and a length of 3' or greater was observed in the levee prism or stability berm or overbuilt section.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	W	E1	No erosion greater than 3" in depth was observed in the levee prism or stability berm, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	C	E1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	A	E2	No erosion greater than 3" in depth was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	M	E2	Erosion with a depth greater than 3" but less than 1' and less than 3' in length was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	U	E2	Erosion with a depth of 1' or greater and a length of 3' or greater was observed in the levee prism or stability berm or overbuilt section.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	W	E2	No erosion greater than 3" in depth was observed in the levee prism or stability berm, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Erosion / Bank Caving	C	E2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Flood Preparedness & Training	A		The LMA has a written system-specific flood response plan and a solid understanding of how to operate, maintain, and staff the Flood Protection System during a flood. LMA maintains a list of emergency contact information for appropriate personnel and other emergency response activities.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Flood Preparedness & Training	M		The LMA maintains a good working knowledge of flood response activities, but documentation of system-specific emergency procedures and emergency contact personnel is	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
				insufficient or out of date.		
Earthen Levee	Operations & Maintenance Manuals	A		Levee Owner's Manual, O&M Manuals, and/or manufacturer's operating instructions are present.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Operations & Maintenance Manuals	M		Manuals are lost or missing or out of date. The LMA will obtain the documents prior to next scheduled inspection	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Operations & Maintenance Manuals	U		LMA has not obtained lost or missing manuals identified during previous inspection.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Repair Gates	A		Gates open and close freely, locks are in place and there is little corrosion on metal parts.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Repair Gates	M		Gates are damaged or corroded but appear to be operable.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Repair Gates	U		Gates are damaged, corroded or impassable and require replacement. District or pass key is not accepted by attached locks.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Repair Gates	W		The gate complies with standards but should be monitored and maintained to avoid a maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Repair Gates	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Riprap Revetments	A		Existing riprap protection has not been displaced and is properly maintained and undamaged. No voids exist under the riprap / grout. Riprap adequately functions as slope protection.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Riprap Revetments	M		Existing riprap protection has been displaced but the subgrade is not exposed and there is no evidence of scour, erosion, or voids. Riprap adequately functions as slope protection.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Riprap Revetments	U		Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Slope protection is needed. Or significant riprap displacement has occurred exposing the subgrade or fabric or there are voids under the riprap.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Riprap Revetments	W		Riprap revetments comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Riprap Revetments	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Seepage / Sandboils	A		No evidence of unrepaired seepage, continuous saturated areas, or sandboils was observed at the time of the inspection.	Design & System Obsolescence	Maintenance Deficiency
Earthen Levee	Seepage / Sandboils	U		Evidence of unrepaired seepage, continuous saturated areas, and/or and boils were observed. Records indicate that unrepaired seepage or sandboils exist.	Design & System Obsolescence	Maintenance Deficiency
Earthen Levee	Seepage / Sandboils	C		The deficiency noted previously has been corrected.	Design & System Obsolescence	Maintenance Deficiency
Earthen Levee	Slope Stability	A	S1	The slope does not show any separation of soil, any caving, soil movement, or other signs of an unstable slope.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	M	S1	Either a separation of soil can be seen, caving was observed on the slope or crown, tension cracks due to a slip or slide, or depressions in the slope were observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	U	S1	A crack or depression with a depth greater than 1" and a length of 200' was observed. A bulge in the slope or at the toe due to upward movement of the soil was observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	W	S1	The area complies with the slope stability standard but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	C	S1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Earthen Levee	Slope Stability	A	S2	The slope does not show any separation of soil, any caving, soil movement, or other signs of an unstable slope.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	M	S2	Either a separation of soil can be seen, caving was observed on the slope or crown, tension cracks due to a slip or slide, or depressions in the slope were observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	U	S2	A crack or depression with a depth greater than 1" and a length of 200' was observed. A bulge in the slope or at the toe due to upward movement of the soil was observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	W	S2	The area complies with the slope stability standard but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	C	S2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	A	S3	The slope does not show any separation of soil, any caving, soil movement, or other signs of an unstable slope.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	M	S3	Either a separation of soil can be seen, caving was observed on the slope or crown, tension cracks due to a slip or slide, or depressions in the slope were observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	U	S3	A crack or depression with a depth greater than 1" and a length of 200' was observed. A bulge in the slope or at the toe due to upward movement of the soil was observed.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	W	S3	The area complies with the slope stability standard but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Slope Stability	C	S3	The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Trim / Thin Trees	A	T1	Any trees on the levee or the landside easement are trimmed up at least 5 feet above the levee slope to allow visibility and flood fight access. All trees are maintained per the Interim Vegetation Criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	M	T1	Moderate density of limbs, leaves, or the trees themselves are partially obstructing visibility and flood fight access to the levee slope and/or beyond the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	U	T1	Significant density of limbs, leaves, or the trees themselves are completely obstructing visibility and flood fight access to the levee slope and/or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	W	T1	Trees comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	C	T1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	A	T2	Any trees on the levee or the landside easement are spaced enough to allow visibility and flood fight access. All trees are maintained per the Interim Vegetation Criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	M	T2	Moderate density of limbs, leaves, or the trees themselves are partially obstructing visibility and flood fight access to the levee slope and/or beyond the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	U	T2	Significant density of limbs, leaves, or the trees themselves are completely obstructing visibility and flood fight access to the levee slope and/or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	W	T2	Trees comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	C	T2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	A	T3	Any trees on the levee or the landside easement are trimmed up at least 5 feet above the levee slope and spaced enough to allow visibility and flood fight access. All trees are maintained per the Interim Vegetation Criteria.	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Earthen Levee	Trim / Thin Trees	M	T3	Moderate density of limbs, leaves, or the trees themselves are partially obstructing visibility and flood fight access to the levee slope and/or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	U	T3	Significant density of limbs, leaves, or the trees themselves are completely obstructing visibility and flood fight access to the levee slope and/or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	W	T3	Trees comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	C	T3	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	A	T4	Any trees on the levee or the landside easement are trimmed up at least 5 feet above the levee slope and spaced enough to allow visibility and flood fight access. All trees are maintained per the Interim Vegetation Criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	M	T4	Moderate density of limbs, leaves, or the trees themselves are partially obstructing visibility and flood fight access to the levee slope and/or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	U	T4	Significant density of limbs, leaves, or the trees themselves are completely obstructing access along the roadway.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	W	T4	Trees comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	C	T4	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	U	T5	There are tree stumps visibly decomposing that may pose a risk to the integrity of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	N	T5	Tree stumps with diameters of 2" or greater were observed on the levee or within the landside easement.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Trim / Thin Trees	C	T5	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Underseepage Relief Wells	A		Toe drainage system and pressure relief wells necessary for maintaining levee stability during flood events functioned properly during the last flood event and no sediment is observed in the horizontal system. Nothing is observed which would indicate that the system won't function properly during the next flood and is maintained per the O&M Manual. Maintenance records are available for review.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Underseepage Relief Wells	M		Toe drainage system or pressure relief wells are not maintained in accordance with the O&M Manual but maintenance records are available, the well has maintained at least 80% efficiency, and has not fallen into disrepair or become clogged.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Underseepage Relief Wells	U		Toe drainage systems or pressure relief wells have observable issues that would indicate that they wouldn't function properly in the next event, OR maintenance records were not available, OR cracks were observed between the ditch and well or in the ditch, OR the system is in disrepair and the pump is operating at less than 80% efficiency.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Underseepage Relief Wells	W		The toe drainage system or pressure relief wells comply with standards but should be monitored and maintained to avoid a maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Underseepage Relief Wells	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Earthen Levee	Vegetation	A	V1	The levee has no unwanted vegetation (brush, bushes, and undesirable weeds) blocking visibility or access; vegetation is maintained per the DWR's vegetation criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	M	V1	Tall grass, weeds, brush or other vegetation partially block visibility of or access to the levee	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
				and/or 15 feet or the limit of the easement at the landside toe and 20 feet from shoulder to the waterside of the levee.	Deficiency	Deficiency
Earthen Levee	Vegetation	U	V1	Tall grass, weeds, brush or other vegetation completely block visibility of or access to the levee and/or to 15 feet or the limit of the easement at the landside toe and also 20 feet from shoulder to the waterside of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V1	The vegetation complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	C	V1	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	A	V2	The levee has no unwanted vegetation (brush, bushes, and undesirable weeds) blocking visibility or access; vegetation is maintained per the DWR's vegetation criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	M	V2	Tall grass, weeds, brush or other vegetation partially block visibility of or access to the levee and/or 15 feet or the limit of the easement at the landside toe and 20 feet from shoulder to the waterside of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	U	V2	Tall grass, weeds, brush or other vegetation completely block visibility of or access to the levee and/or to 15 feet or the limit of the easement at the landside toe and also 20 feet from shoulder to the waterside of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V2	The vegetation complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	C	V2	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	A	V4	The levee has no unwanted vegetation (brush, bushes, and undesirable weeds) blocking visibility or access; vegetation is maintained per the DWR's vegetation criteria.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	M	V4	Tall grass, weeds, brush or other vegetation partially block visibility of or access to the levee and/or 15 feet or the limit of the easement at the landside toe and 20 feet from shoulder to the waterside of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	U	V4	Tall grass, weeds, brush or other vegetation completely block visibility of or access to the levee and/or to 15 feet or the limit of the easement at the landside toe and also 20 feet from shoulder to the waterside of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V4	The vegetation complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	C	V4	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	1	V5	Between 75% and 50% of the levee slope (both sides) is covered with grass or sod.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	2	V5	75% or more of the levee slope (both sides) is covered with grass or sod.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	3	V5	Plants greater than 2 inches in diameter exist but do not obstruct visibility.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	4	V5	Brush and/or weeds exist on the waterside side of the levee beyond the top 20 feet that obstruct visibility.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	5	V5	This area complies with the USACE ETL 1110-2-571 vegetation standards.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	C	V5	The deficiency noted previously has been corrected.	Design & System	Design & System

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
					Obsolescence	Obsolescence
Earthen Levee	Vegetation	A	V6	The Levee has no unwanted vegetation (brush, bushes, and undesirable weeds) blocking visibility or access; vegetation is maintained per the Interim Vegetation Criteria.	Enforcement	Enforcement
Earthen Levee	Vegetation	M	V6	Landowner maintained vegetation partially block visibility of or access to the levee and/or 15 feet or the limit of the easement at the landside toe and 20 feet from shoulder to the waterside of the levee.	Enforcement	Enforcement
Earthen Levee	Vegetation	U	V6	Landowner maintained vegetation completely block visibility of or access to the levee and/or to 15 feet or the limit of the easement at the landside toe and also 20 feet from shoulder to the waterside of the levee.	Enforcement	Enforcement
Earthen Levee	Vegetation	W	V6	The vegetation complies with standards but should be monitored and maintained to avoid a future maintenance issue.	Enforcement	Enforcement
Earthen Levee	Vegetation	C	V6	The deficiency noted previously has been corrected.	Enforcement	Enforcement
Earthen Levee	Vegetation	A	V7	No trees or woody vegetation have been identified that currently pose an unacceptable threat to the integrity of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	U	V7	Trees or woody vegetation exist that pose an unacceptable threat to the integrity of the levee. Identified trees shall be removed and associated root balls and roots shall be appropriately removed in coordination with the resource agencies.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V7	Monitor trees or woody vegetation which may pose a future unacceptable threat to the integrity of the levee.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	C	V7	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V8	Vegetation was introduced, allowed, required as mitigation, or endorsed by a previous DWR or USACE action as necessary to comply with environmental requirements.	Design & System Obsolescence	Design & System Obsolescence
Earthen Levee	Vegetation	A	V9	The roadway has no unwanted vegetation (brush, bushes, and undesirable weeds) blocking visibility or access.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	M	V9	Tall grass, weeds, brush or other vegetation partially block visibility of or access along the roadway.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	U	V9	Tall grass, weeds, brush or other vegetation completely block visibility of or access along the roadway.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	W	V9	The roadway does not have any vegetation blocking visibility or access currently, but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Earthen Levee	Vegetation	C	V9	The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Concrete Foundations	A		No scouring / erosion or undermining near the structure.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Foundations	M		Scouring / erosion near the footing of the structure but not close enough to affect structure stability during the next flood.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Foundations	U		Scouring or undermining at the foundation that has affected structural integrity.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Foundations	W		There was no scouring / erosion or undermining observed but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Foundations	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage	Concrete Surfaces	A		Negligible spalling, scaling or cracking. If the concrete surface is weathered, rough to the	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
& Piping Systems				touch or holds moisture, it is still satisfactory but should be seal coated to prevent freeze / thaw damage.	Deficiency	Deficiency
Interior Drainage & Piping Systems	Concrete Surfaces	M		Spalling, scaling, and open cracking present, but the immediate integrity or performance of the project is not threatened. Reinforcing steel may be exposed. Repairs / sealing is necessary to prevent additional damage during periods of thawing and freeze.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Concrete Surfaces	U		Surface deterioration or deep cracks present that result in an threaten the integrity of the project.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Concrete Surfaces	W		Concrete surfaces were intact but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Concrete Surfaces	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Concrete Tilting / Settlement	A		There are no significant areas of tilting, sliding or settlement that would endanger the integrity of the project.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Tilting / Settlement	M		There are areas of tilting, sliding or settlement (either active or inactive) that need to be repaired. The integrity of the structure is not in danger.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Tilting / Settlement	U		There are areas of tilting, sliding or settlement (either active or inactive) that threaten the structure's integrity and performance.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Tilting / Settlement	W		There was no concrete tilting or settlement observed but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Concrete Tilting / Settlement	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Culverts: Breaks / Holes / Cracks	A		There are no breaks, holes, cracks in the culvert that would result in significant water leakage. Pipes are in good condition or have been relined with appropriate material, which is still in good condition.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Breaks / Holes / Cracks	M		There are breaks, holes, cracks in the culvert that would result in water leakage and need to be repaired, but do not threaten the integrity of the project. Pipes may showing deterioration but do not threaten the integrity of the project.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Breaks / Holes / Cracks	U		Culvert has deterioration and/or has significant leakage such that it threatens the integrity of the project. Pipes are in danger of collapsing or have already begun to collapse.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Breaks / Holes / Cracks	W		The culvert does not currently have any significant integrity issues but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Breaks / Holes / Cracks	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	A		There is little or no debris, sediment or vegetation blocking the culverts, inlets, sump or discharge areas. The channel capacity for designed flow is not affected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	M		Debris, sediment or vegetation blocks less than 10% of the culvert opening, but must be removed.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	U		Accumulated debris, sediment or vegetation blocks more than 10% of the culvert opening, impairing the culvert's capacity and hydraulic effectiveness.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	W		No material was observed blocking the culvert, but has been observed in the past and the location should be monitored and maintained.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage	Electric Gate	A		All electric gate operators are in good working condition and are adequately powered, and	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
& Piping Systems	Operators			are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is tested periodically.	Deficiency	Deficiency
Interior Drainage & Piping Systems	Electric Gate Operators	M		All electric gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Electric Gate Operators	U		The electric gate operators are not operational, or the power source is not considered reliable to sustain operations during flood conditions.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Electric Gate Operators	W		Electric gate operators functioned as designed but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Electric Gate Operators	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Encroachments	A		No trash, debris, excavation, structures, or other obstructions present within the project easement area was observed. Encroachments which do not diminish proper functioning of the project have been previously approved by the CVFPB and are maintained per permit conditions.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Encroachments	M		Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations was observed. Encroachments have been approved by the CVFPB but may need maintenance.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Encroachments	U		Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operation was observed.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Encroachments	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Encroachments	W		Encroachments were not currently observed, but have been observed in the past and the location should be monitored. Permitted encroachments should be monitored and maintained for compliance with permit conditions.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Erosion Areas	A		No erosion greater than 3" in depth was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Erosion Areas	M		Erosion with a depth greater than 3" but less than 1' and less than 3' in length was observed in the levee prism or stability berm.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Erosion Areas	U		Erosion with a depth of 1' or greater and a length of 3' or greater was observed in the levee prism or stability berm or overbuilt section.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Erosion Areas	W		No erosion greater than 3" in depth was observed in the levee prism or stability berm, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Erosion Areas	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Interior Drainage & Piping Systems	Flap Gates	A		Flap gates open and close easily with minimal leakage. Gates show no corrosion damage and have been maintained.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Flap Gates	M		Gates will not fully open or close because of obstructions that can be easily removed or have corrosion damage that requires maintenance.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Flap Gates	U		Gate is missing, has been damaged or has deteriorated and needs repair. Gate will not prevent flow from the channel toward the landside.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Flap Gates	W		Flap gates open and close with minimal leakage and function as designed but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Flap Gates	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Enforcement

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Interior Drainage & Piping Systems	Manual Gate Operators	A		All manual gate operators are in good working condition and are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is tested periodically.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Manual Gate Operators	M		Manual gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Manual Gate Operators	U		Manual gate operators are not operational.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Manual Gate Operators	W		Manual gate operators functioned as designed but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Manual Gate Operators	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Metal Pipes	A		There are no breaks, holes, cracks in the pipe that would result in significant water leakage. Pipes are in good condition or have been relined with appropriate material, which is still in good condition.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Metal Pipes	M		There are breaks, holes, cracks in the pipe that would result in water leakage and need to be repaired, but do not threaten the integrity of the project. Pipes may showing deterioration but do not threaten the integrity of the project.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Metal Pipes	U		Pipe has deterioration and/or has significant leakage such that it threatens the integrity of the project. Pipes are in danger of collapsing or have already begun to collapse.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Metal Pipes	W		The Pipe does not currently have any significant integrity issues but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Metal Pipes	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Enforcement
Interior Drainage & Piping Systems	Revetments	A		Existing riprap protection has not been displaced and is properly maintained and undamaged. No voids exist under the riprap / grout. Riprap has been engineered.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Revetments	M		Existing riprap protection has been displaced but the subgrade is not exposed and there is no evidence of scour, erosion, or voids. Riprap adequately functions as slope protection.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Revetments	U		Scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Slope protection is needed. Or significant riprap displacement has occurred exposing the subgrade or fabric or there are voids under the riprap.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Revetments	W		Riprap revetments comply with standards but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Revetments	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Security Fencing	A		Safety / security fencing is 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.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Security Fencing	M		Safety / security fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Security Fencing	U		Safety / security fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous project features are not secured.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Security Fencing	W		Security fencing was adequate but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage	Security Fencing	C		The deficiency noted previously has been corrected.	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
& Piping Systems					Deficiency	Deficiency
Interior Drainage & Piping Systems	Sluice / Slide Gates	A		Gates open and close freely with minor leakage. Sill is free of sediment and other obstructions. Gates and lifters have been maintained.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Sluice / Slide Gates	M		Gates have been damaged or have deteriorated, and open and close with resistance or binding. Leakage quantity is controllable and is not a threat to project performance. Maintenance is required.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Sluice / Slide Gates	U		Gates do not open or close. Gate, stem, lifter and/or guides are damaged or corroded.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Sluice / Slide Gates	W		Gates functioned as designed but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Sluice / Slide Gates	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Trash Racks	A		Trash racks are fastened in place and properly maintained.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Trash Racks	M		Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station. Repair or replacement is required.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Trash Racks	U		Trash rack is missing, damaged or not operational, or deficiencies will inhibit operations during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Trash Racks	W		The trash rack was in place and functioning as designed but should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Trash Racks	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Vegetation & Obstructions	A		Minimal, scattered obstructions or vegetation. The flow is not impeded.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Vegetation & Obstructions	M		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 25% of the designed channel capacity.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Vegetation & Obstructions	U		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 50% of the designed channel capacity.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Vegetation & Obstructions	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Interior Drainage & Piping Systems	Vegetation & Obstructions	W		Vegetation does not currently impede flow significantly, but the area should be monitored and maintained to avoid a future maintenance issue.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Closure Structures	A		The closure structure for lower areas of floodwalls is in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components of closure clearly marked and installation instructions / procedures readily available. Trial erections have been accomplished in accordance with the O&M Manual.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Closure Structures	U		The closure structure for lower areas of floodwalls is in poor condition. Parts missing or corroded. Placing equipment may not be available within normal warning time. Trial erections have not been accomplished in accordance with the O&M Manual.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Closure Structures	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Concrete Foundations	A		No scouring / erosion or undermining near the floodwall.	Maintenance Deficiency	Design & System Obsolescence
Concrete	Concrete Foundations	M		Scouring / erosion near the footing of the floodwall but not close enough to affect project	Maintenance	Design & System

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Floodwalls				stability during the next flood.	Deficiency	Obsolescence
Concrete Floodwalls	Concrete Foundations	U		Scouring or undermining at the foundation that has affected integrity of the floodwall.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Concrete Foundations	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Concrete Surfaces	A		Negligible spalling, scaling or cracking. If the concrete surface is weathered, rough to the touch or holds moisture, it is still satisfactory but should be seal coated to prevent freeze / thaw damage.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Concrete Surfaces	M		Spalling, scaling, and open cracking present, but the immediate integrity or performance of the floodwall is not threatened. Reinforcing steel may be exposed. Repairs / sealing is necessary to prevent additional damage during periods of thawing and freeze.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Concrete Surfaces	U		Surface deterioration or deep cracks present that result in an threaten the integrity of the floodwall.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Concrete Surfaces	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Concrete Tilting / Settlement	A		There are no significant areas of tilting, sliding or settlement that would endanger the integrity of the floodwall.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Concrete Tilting / Settlement	M		There are areas of tilting, sliding or settlement (either active or inactive) that need to be repaired. The integrity of the floodwall is not in danger.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Concrete Tilting / Settlement	U		There are areas of tilting, sliding or settlement (either active or inactive) that threaten the integrity of the floodwall.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Concrete Tilting / Settlement	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Encroachments	A		No trash, debris, excavations, structure, or other obstructions that block visibility or access was along the floodwall or within the easement observed. No inappropriate activities that inhibit project operations and maintenance or emergency operations we observed.	Maintenance Deficiency	Enforcement
Concrete Floodwalls	Encroachments	M		Trash, debris, excavations, structure, or other obstructions blocking visibility or access along the floodwall or within the easement was observed but will not inhibit operations and maintenance or emergency operations.	Maintenance Deficiency	Enforcement
Concrete Floodwalls	Encroachments	U		Trash, debris, excavation, structures, or other obstructions along the floodwall or within the easement was observed that may inhibit operations and maintenance or emergency operations.	Maintenance Deficiency	Enforcement
Concrete Floodwalls	Encroachments	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Enforcement
Concrete Floodwalls	Erosion / Bank Caving	A		No active erosion or bank caving observed on the landward or on the waterside of the floodwall.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Erosion / Bank Caving	M		There are areas where active erosion is occurring or has occurred on or near the floodwall, but project integrity is not threatened.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Erosion / Bank Caving	U		Erosion or caving is occurring or has occurred that threatens the stability and integrity of the floodwall. The erosion or caving has compromised project integrity.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Erosion / Bank Caving	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Monolith Joints	A		The monolith joint material is in good condition.	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Concrete Floodwalls	Monolith Joints	M		The monolith joint material is deteriorating and needs to be repaired or replaced to prevent spalling and cracking during freeze / thaw cycles.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Monolith Joints	U		The monolith joint material is severely deteriorated and the concrete has spalled and cracked, damaging the water stop to the point where it will not provide the intended level of protection during a flood.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Monolith Joints	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Underseepage Relief Wells	A		Toe drainage system and pressure relief wells necessary for maintaining project stability during flood events functioned properly during the last flood event and no sediment is observed in horizontal system. Nothing is observed which would indicate that the system won't function properly during the next flood and is maintained per the O&M Manual. Maintenance records are available for review.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Underseepage Relief Wells	M		Toe drainage system or pressure relief wells are not maintained in accordance with the O&M Manual but maintenance records are available, the well has maintained at least 80% efficiency, and has not fallen into disrepair or become clogged.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Underseepage Relief Wells	U		Toe drainage systems or pressure relief wells have observable issues that would indicate that they wouldn't function properly in the next event. Maintenance records are be available. Cracks were observed between the ditch and well or in the ditch. The system is in disrepair and the well is operating at less than 80% efficiency.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Underseepage Relief Wells	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Design & System Obsolescence
Concrete Floodwalls	Vegetation	A		No vegetation blocking visibility or access was along the floodwall or within the easement observed.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Vegetation	M		Vegetation blocking visibility or access along the floodwall or within the easement was observed but will not inhibit operations and maintenance or emergency operations.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Vegetation	U		Vegetation along the floodwall or within the easement was observed that may inhibit operations and maintenance or emergency operations.	Maintenance Deficiency	Maintenance Deficiency
Concrete Floodwalls	Vegetation	C		The deficiency noted previously has been corrected.	Maintenance Deficiency	Maintenance Deficiency

Table G-2: Channel Inspection Rating Categories

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Channels	Concrete Foundations	A		No scouring / erosion or undermining near the channel.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Concrete Foundations	M		Scouring / erosion near the footing of the structure but not close enough to affect channel integrity or capacity during the next flood.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Concrete Foundations	U		Scouring or undermining at the foundation that threaten the channel's integrity and capacity.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Concrete Surfaces	A		Negligible spalling, scaling or cracking. If the concrete surface is weathered, rough to the touch or holds moisture, it is still satisfactory but should be seal coated to prevent freeze / thaw damage.	Maintenance Deficiency	Enforcement
Channels	Concrete Surfaces	M		Spalling, scaling, and open cracking present, but the immediate integrity or capacity of the channel is not threatened. Reinforcing steel may be exposed. Repairs / sealing is necessary to prevent additional damage during periods of thawing and freeze.	Maintenance Deficiency	Enforcement
Channels	Concrete Surfaces	U		Surface deterioration or deep cracks present that result in an threaten the channel's integrity and capacity.	Maintenance Deficiency	Enforcement
Channels	Concrete Tilting / Settlement	A		There are no significant areas of tilting, sliding or settlement that would endanger the integrity of the project.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Concrete Tilting / Settlement	M		There are areas of tilting, sliding or settlement (either active or inactive) that need to be repaired. The integrity and capacity of the channel is not affected.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Concrete Tilting / Settlement	U		There are areas of tilting, sliding or settlement (either active or inactive) that threaten the channel's integrity and capacity.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Encroachments	A		No trash, debris, excavation, structures, or other obstructions present within the easement. Encroachments which do not diminish proper functioning of the project have been previously approved by the Central Valley Flood Protection Board.	Maintenance Deficiency	Enforcement
Channels	Encroachments	M		Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations were observed. Encroachments have been approved by the Central Valley Flood Protection Board.	Maintenance Deficiency	Enforcement
Channels	Encroachments	U		Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operation were observed.	Maintenance Deficiency	Enforcement
Channels	Erosion / Bank Caving	A		No erosion encroaching into the channel bank that would endanger the capacity of the channel was observed.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Erosion / Bank Caving	M		Erosion encroaching into the channel bank less than 1 foot into the designed grade or cross section was observed.	Maintenance Deficiency	Design & System Obsolescence, Enforcement
Channels	Erosion / Bank Caving	U		Erosion encroaching into the channel bank more than 1 foot into the designed grade or cross section was observed. Corrective actions required to stop or slow erosion.	Maintenance Deficiency	Design & System Obsolescence, Enforcement

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Channels	Gates	A		Gates open and close easily with minimal leakage. Gates show no corrosion damage and have been maintained.	Maintenance Deficiency	Enforcement
Channels	Gates	M		Gates will not fully open or close because of obstructions that can be easily removed or have corrosion damage. Gate operators may need lubrication or other maintenance but do not threaten the integrity of capacity of the channel.	Maintenance Deficiency	Enforcement
Channels	Gates	U		Gate is missing, has been damaged or has deteriorated and needs repair. Gate will not prevent flow from the channel toward the landside.	Maintenance Deficiency	Enforcement
Channels	Revetments	A		Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible.	Maintenance Deficiency	Maintenance Deficiency, Enforcement
Channels	Revetments	M		Riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow was observed, but the integrity and capacity of the channel is not affected. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.	Maintenance Deficiency	Enforcement
Channels	Revetments	U		Dense brush, trees, or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Cavities may exist under the revetment.	Maintenance Deficiency	Enforcement
Channels	Revetments	N		There is no revetment at this location and is not needed.	Maintenance Deficiency	Enforcement
Channels	Shoaling / Sedimentation	A		No shoaling or sedimentation present.	Maintenance Deficiency	Maintenance Deficiency
Channels	Shoaling / Sedimentation	M		Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.	Maintenance Deficiency	Maintenance Deficiency
Channels	Shoaling / Sedimentation	U		Shoaling is well established, stabilized by trees, brush or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.	Maintenance Deficiency	Maintenance Deficiency
Channels	Vegetation & Obstructions	A		Minimal, scattered obstructions or vegetation. The flow is not impeded.	Maintenance Deficiency	Maintenance Deficiency
Channels	Vegetation & Obstructions	M		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 25% of the capacity.	Maintenance Deficiency	Maintenance Deficiency
Channels	Vegetation & Obstructions	U		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 50% of the capacity.	Maintenance Deficiency	Maintenance Deficiency

Table G-3: Structure Rating Categories

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Structures	Closure Structures	A		Closure structures for lower areas of floodwall or levee are in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components of closure clearly marked and installation instructions / procedures readily available. Trial erections have been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Structures	Closure Structures	U		Closure structures for lower areas of floodwall or levee in poor condition. Parts missing or corroded. Placing equipment may not be available within normal warning time. Trial erections have not been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Structures	Closure Structures	N		This structure does not have a closure structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Concrete Foundations	A		No scouring / erosion or undermining near the structure.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Foundations	M		Scouring / erosion near the footing of the structure but not close enough to affect structure stability during the next flood.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Foundations	U		Scouring or undermining at the foundation that has affected structural integrity.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Foundations	N		There are no concrete foundations at this structure.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Surfaces	A		Negligible spalling, scaling or cracking. If the concrete surface is weathered, rough to the touch or holds moisture, it is still satisfactory but should be seal coated to prevent freeze / thaw damage.	Maintenance Deficiency	Maintenance Deficiency
Structures	Concrete Surfaces	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 freeze.	Maintenance Deficiency	Maintenance Deficiency
Structures	Concrete Surfaces	U		Surface deterioration or deep cracks present that result in an threaten the integrity of the structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Concrete Surfaces	N		There are no concrete surfaces on this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Concrete Tilting / Settlement	A		There are no significant areas of tilting, sliding or settlement that would endanger the integrity of the project.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Tilting / Settlement	M		There are areas of tilting, sliding or settlement (either active or inactive) that need to be repaired. The integrity of the structure is not in danger.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Tilting / Settlement	U		There are areas of tilting, sliding or settlement (either active or inactive) that threaten the structure's integrity and performance.	Maintenance Deficiency	Design & System Obsolescence
Structures	Concrete Tilting / Settlement	N		There is no concrete at this structure.	Maintenance Deficiency	Design & System Obsolescence
Structures	Culverts: Breaks / Holes / Cracks	A		There are no breaks, holes, cracks in the culvert that would result in significant water leakage. Pipes are in good condition or have been relined with appropriate material, which is still in good condition.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Breaks / Holes / Cracks	M		There are breaks, holes, cracks in the culvert that would result in water leakage and need to be repaired, but do not threaten the integrity of the project. Pipes may showing deterioration but do not threaten the integrity of the project.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Breaks /	U		Culvert has deterioration and/or has significant leakage such that it threatens the integrity of	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
	Holes / Cracks			the project. Pipes are in danger of collapsing or have already begun to collapse.	Deficiency	Deficiency
Structures	Culverts: Breaks / Holes / Cracks	N		There are no culverts at this structure that were able to be inspected.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Inlets / Outlets	A		There is little or no debris, sediment or vegetation blocking the culverts, inlets, sump or discharge areas. The channel capacity for designed flow is not affected.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Inlets / Outlets	M		Debris, sediment or vegetation blocks less than 10% of the culvert opening, but must be removed.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Inlets / Outlets	U		Accumulated debris, sediment or vegetation blocks more than 10% of the culvert opening, impairing the culvert's capacity and hydraulic effectiveness.	Maintenance Deficiency	Maintenance Deficiency
Structures	Culverts: Inlets / Outlets	N		There are no culverts at this structure that were able to be inspected.	Maintenance Deficiency	Maintenance Deficiency
Structures	Electric Gate Operators	A		All electric gate operators are in good working condition and are adequately powered, and are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is tested periodically.	Maintenance Deficiency	Maintenance Deficiency
Structures	Electric Gate Operators	M		All electric gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Structures	Electric Gate Operators	U		The electric gate operators are not operational, or the power source is not considered reliable to sustain operations during flood conditions.	Maintenance Deficiency	Maintenance Deficiency
Structures	Electric Gate Operators	N		No electric gate operators exist on this structure. Gates are only opened manually or do not exist at this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Encroachments	A		No trash, debris, excavation, structures, or other obstructions present within the easement. Encroachments which do not diminish proper functioning of the project have been previously approved by the Central Valley Flood Protection Board.	Maintenance Deficiency	Enforcement
Structures	Encroachments	M		Trash, debris, excavations, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations were observed. Encroachments have been approved by the Central Valley Flood Protection Board.	Maintenance Deficiency	Enforcement
Structures	Encroachments	U		Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operation were observed.	Maintenance Deficiency	Enforcement
Structures	Erosion / Bank Caving	A		No active erosion or bank caving observed on the landward or on the waterside of the levee / channel.	Maintenance Deficiency	Maintenance Deficiency
Structures	Erosion / Bank Caving	M		There are areas where active erosion is occurring or has occurred on or near the levee / bank, but project integrity is not threatened.	Maintenance Deficiency	Maintenance Deficiency
Structures	Erosion / Bank Caving	U		Erosion or caving is occurring or has occurred that threatens the stability and integrity of the project. The erosion or caving has compromised project integrity.	Maintenance Deficiency	Maintenance Deficiency
Structures	Flap Gates	A		Flap gates open and close easily with minimal leakage. Gates show no corrosion damage and have been maintained.	Maintenance Deficiency	Maintenance Deficiency
Structures	Flap Gates	M		Gates will not fully open or close because of obstructions that can be easily removed or have corrosion damage that requires maintenance.	Maintenance Deficiency	Maintenance Deficiency
Structures	Flap Gates	U		Gate is missing, has been damaged or has deteriorated and needs repair. Gate will not prevent flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Structures	Flap Gates	N		There are no flap gates on this structure that were able to be inspected and are not needed to ensure water does not flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Structures	Manual Gate Operators	A		All manual gate operators are in good working condition and are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
				tested periodically.		
Structures	Manual Gate Operators	M		Manual gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Structures	Manual Gate Operators	U		Manual gate operators are not operational.	Maintenance Deficiency	Maintenance Deficiency
Structures	Manual Gate Operators	N		There are no sluice/slide gates on this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Metal Pipes	A		There are no breaks, holes, cracks in the culvert that would result in significant water leakage. Metal pipes are in good condition or have been relined with appropriate material, which is still in good condition.	Maintenance Deficiency	Maintenance Deficiency
Structures	Metal Pipes	M		There are breaks, holes, cracks in the pipe that would result in water leakage and need to be repaired, but do not threaten the integrity of the project. Pipes may showing deterioration but do not threaten the integrity of the project.	Maintenance Deficiency	Maintenance Deficiency
Structures	Metal Pipes	U		Pipe has deterioration and/or has significant leakage such that it threatens the integrity of the structure. Pipes are in danger of collapsing or have already begun to collapse.	Maintenance Deficiency	Maintenance Deficiency
Structures	Metal Pipes	N		There are no pipes at this structure that were able to be inspected.	Maintenance Deficiency	Maintenance Deficiency
Structures	Monolith Joints	A		The monolith joint material is in good condition.	Maintenance Deficiency	Maintenance Deficiency
Structures	Monolith Joints	M		The monolith joint material is deteriorating and needs to be repaired or replaced to prevent spalling and cracking during freeze / thaw cycles.	Maintenance Deficiency	Maintenance Deficiency
Structures	Monolith Joints	U		The monolith joint material is severely deteriorated and the concrete has spalled and cracked, damaging the water stop to the point where it will not provide the intended level of protection during a flood.	Maintenance Deficiency	Maintenance Deficiency
Structures	Monolith Joints	N		There are no monolith joints at this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Other Metallic Items	A		All metal parts are protected from corrosion damage, and show no rust or deterioration that would cause a safety concern.	Maintenance Deficiency	Maintenance Deficiency
Structures	Other Metallic Items	M		Corrosion seen on metallic parts (except equipment anchors) appears maintainable.	Maintenance Deficiency	Maintenance Deficiency
Structures	Other Metallic Items	U		Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	Maintenance Deficiency	Maintenance Deficiency
Structures	Other Metallic Items	N		There are no metallic parts at this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Revetments	A		Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible.	Maintenance Deficiency	Maintenance Deficiency
Structures	Revetments	M		No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.	Maintenance Deficiency	Maintenance Deficiency
Structures	Revetments	U		Dense brush, trees, or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Cavities may exist under the revetment.	Maintenance Deficiency	Maintenance Deficiency
Structures	Revetments	N		There is no revetment at this location and is not needed.	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Structures	Safety	A		No exhaust leaks in building. Fuel storage/distribution meets state/local requirement. Fire extinguishers on hand, of sufficient quantity, and properly charged. Safety hardware installed. Required safety items used (hearing, eyes, etc.).	Maintenance Deficiency	Maintenance Deficiency
Structures	Safety	M		Minor safety hazards are present, but do not pose an immediate threat to the pumping plant or personnel at the plant. Corrections should be made prior to the next annual inspection.	Maintenance Deficiency	Maintenance Deficiency
Structures	Safety	U		Safety issues exist that could cause injury or loss of life.	Maintenance Deficiency	Maintenance Deficiency
Structures	Security Fencing	A		Safety / security fencing is 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.	Maintenance Deficiency	Maintenance Deficiency
Structures	Security Fencing	M		Safety / security fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	Maintenance Deficiency	Maintenance Deficiency
Structures	Security Fencing	U		Safety / security fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous project features are not secured.	Maintenance Deficiency	Maintenance Deficiency
Structures	Security Fencing	N		No safety / security fencing or gates exist or are needed.	Maintenance Deficiency	Maintenance Deficiency
Structures	Shoaling / Sedimentation	A		No shoaling or sedimentation present.	Maintenance Deficiency	Maintenance Deficiency
Structures	Shoaling / Sedimentation	M		Non-aquatic grasses present on shoal. No trees or brush are present on shoal, and structure operation and channel flows are not impeded.	Maintenance Deficiency	Maintenance Deficiency
Structures	Shoaling / Sedimentation	U		Shoaling is well established, stabilized by trees, brush or other vegetation. Shoals are obstructing structure operation or diverting flow to channel bank causing bank erosion and undercutting.	Maintenance Deficiency	Maintenance Deficiency
Structures	Sluice/Slide Gates	A		Gates open and close freely with minor leakage. Sill is free of sediment and other obstructions. Gates and lifters have been maintained.	Maintenance Deficiency	Maintenance Deficiency
Structures	Sluice/Slide Gates	M		Gates have been damaged or have deteriorated, and open and close with resistance or binding. Leakage quantity is controllable and is not a threat to project performance. Maintenance is required.	Maintenance Deficiency	Maintenance Deficiency
Structures	Sluice/Slide Gates	U		Gates do not open or close. Gate, stem, lifter and/or guides are damaged or corroded.	Maintenance Deficiency	Maintenance Deficiency
Structures	Sluice/Slide Gates	N		There are no sluice / slide gates on this structure and are not needed to ensure water does not flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Racks	A		Trash racks are fastened in place and properly maintained.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Racks	M		Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station. Repair or replacement is required.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Racks	U		Trash rack is missing, damaged or not operational, or deficiencies will inhibit operations during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Racks	N		There are no trash racks that were able to be inspected at this structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Rakes	A		Drive chain, bearings, gear reducers, and other components are in good operating condition and are being properly maintained.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Rakes	M		The trash rake is in need of maintenance, but is still operational.	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Structures	Trash Rakes	U		Trash rake is not operational or deficiencies will inhibit operations during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Structures	Trash Rakes	N		There are no trash rakes at the structure.	Maintenance Deficiency	Maintenance Deficiency
Structures	Vegetation & Obstructions	A		Minimal, scattered obstructions or vegetation. The flow is not impeded.	Maintenance Deficiency	Maintenance Deficiency
Structures	Vegetation & Obstructions	M		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 25% of the capacity.	Maintenance Deficiency	Maintenance Deficiency
Structures	Vegetation & Obstructions	U		Log jams, snags, vegetation growth (such as cat tails, bull rushes, bushes or saplings) or other obstructions block approximately 50% of the capacity.	Maintenance Deficiency	Maintenance Deficiency

Table G-4: Pump Station Rating Categories

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Pump Stations	Closure Structures	A		Closure structures for lower areas of floodwall or levee are in good repair. Placing equipment, stoplogs, and other materials are readily available at all times. Components of closure clearly marked and installation instructions / procedures readily available. Trial erections have been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Closure Structures	U		Closure structure for lower areas of floodwall or levee in poor condition. Parts missing or corroded. Placing equipment may not be available within normal warning time. Trial erections have not been accomplished in accordance with the O&M manual.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Closure Structures	N		This plant does not have a closure structure.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Communications	A		Telephone, cellular telephone, two-way radio, or similar device is available to pumping plant operator or maintenance personnel.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Communications	U		Pumping plant operator or maintenance personnel required to leave the plant and drive to access communications.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Cranes	A		Crane operational, and has been inspected and load tested in accordance with OSHA requirements.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Cranes	M		Crane has not been inspected or operationally tested within the past year, or there are visible signs of corrosion, oil leakage, etc., requiring maintenance.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Cranes	U		Crane not operational, or tagged out of service.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Cranes	N		There is no crane is located at this station.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Electric Gate Operators	A		All electric gate operators are in good working condition and are adequately powered, and are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is tested periodically.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Electric Gate Operators	M		All electric gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Electric Gate Operators	U		The electric gate operators are not operational, or the power source is not considered reliable to sustain operations during flood conditions.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Electric Gate Operators	N		No electric gate operators exist on this plant. Gates are only opened manually or do not exist at this plant.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Flap Gates	A		Flap gates open and close easily with minimal leakage. Gates show no corrosion damage and have been maintained.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Flap Gates	M		Gates will not fully open or close because of obstructions that can be easily removed or have corrosion damage that requires maintenance.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Flap Gates	U		Gate is missing, has been damaged or has deteriorated and needs repair. Gate will not prevent flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Flap Gates	N		There are no flap gates on this plant and are not needed to ensure water does not flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Intake and Discharge Pipes	A		There are no breaks, holes, corrosion or cracks in the pipe that would result in significant water leakage. The pipe shape is essentially circular. All joints appear to be closed and the soil tight.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Intake and Discharge	M		Pipe is not leaking significantly but shows signs of corrosion, deformation, or joint damage	Maintenance	Maintenance

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
	Pipes			and requires maintenance.	Deficiency	Deficiency
Pump Stations	Intake and Discharge Pipes	U		Pipe has deterioration and/or leakage. Immediate repair or replacement required.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Manual Gate Operators	A		All manual gate operators are in good working condition and are capable of opening and closing the gate properly. Preventative maintenance is being performed and the system is tested periodically.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Manual Gate Operators	M		Manual gate operators are operational with minor deficiencies, but should perform through the next period of usage.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Manual Gate Operators	U		Manual gate operators are not operational.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Manual Gate Operators	N		There are no sluice/slide gates on this plant.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Motors, Engines, Fans & Gear Reducers	A		All items are operational. Preventive maintenance and lubrication is being performed and the system is periodically subjected to performance testing. Instrumentation, alarms, and auto shutdowns are operational.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Motors, Engines, Fans & Gear Reducers	M		Systems have minor deficiencies, but are operational and will function adequately through the next flood.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Motors, Engines, Fans & Gear Reducers	U		One or more primary motors or systems are not operational.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Motors, Engines, Fans & Gear Reducers	N		There are no motors or auxiliary mechanical equipment as part of this station.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Operating Log	A		Operation and Maintenance log is present at the pumping plant and is being used and updated. Personnel have been trained in pumping plant operations. Names and last training date shown in the log book.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Operating Log	U		No operating log present, or refresher training for personnel has not been conducted.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Operation & Maintenance Manual	A		Operation and Maintenance (O&M) Manual and/or posted operating instructions are present and adequately covers all pertinent pumping plant features.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Operation & Maintenance Manual	U		Operation and Maintenance (O&M) Manual and/or posted operating instructions are missing or sponsor is unsure of location.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Other Metallic Items	A		All metal parts are protected from corrosion damage, and show no rust or deterioration that would cause a safety concern.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Other Metallic Items	M		Corrosion seen on metallic parts (except equipment anchors) appears maintainable.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Other Metallic Items	U		Metallic parts are severely corroded and require replacement to prevent failure, equipment damage, or safety issues.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Other Metallic Items	N		There are no metallic parts at this plant other than pumps and associated pressure pipes.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Plant Building	A		Plant structure is in good structural condition with no major cracks in concrete or brick. The roof is not leaking, exhaust fans are operational, there are no exposed electrical components, and the working environment is safe.	Maintenance Deficiency	Design & System Obsolescence
Pump Stations	Plant Building	M		There is significant cracking in the building structure, or the building is damaged in other ways such that it needs repair but does not threaten pumping operations.	Maintenance Deficiency	Design & System Obsolescence
Pump Stations	Plant Building	U		The structural integrity or stability of the structure is threatened, or there is other damage to	Maintenance	Design & System

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
				the building such that pumping operations can not be performed as intended.	Deficiency	Obsolescence
Pump Stations	Power	A		The power source is adequate, safe, and reliable. Backup generators are on hand or there is a reliable backup power plan in place. Backup units are properly sized, operational, periodically exercised, and properly maintained.	Maintenance Deficiency	Design & System Obsolescence
Pump Stations	Power	U		Power source not considered safe or reliable to sustain operations during flood conditions.	Maintenance Deficiency	Design & System Obsolescence
Pump Stations	Power	N		Pumping plant does not need electricity to operate. Pumping capacity can be maintained without power.	Maintenance Deficiency	Design & System Obsolescence
Pump Stations	Pump Control Systems	A		Operational and maintained free of damage, corrosion, or other debris.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Pump Control Systems	M		Operational with minor discrepancies. Will function adequately during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Pump Control Systems	U		Pump controls not operational. May not function adequately during the next flood season.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Pumps	A		All pumps appear to be properly maintained and lubricated. System is periodically tested. There is no evidence of cavitation, vibration, or unusual sounds.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Pumps	M		Minor deficiencies exist which need to be closely monitored or repaired, such as the presence of minor vibrations or the corrosion of the pump shaft housing. However the pumps are operational and are expected to perform through the next expected period of usage.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Pumps	U		One or more of the pumps are not operational, or the pump capacity has degraded to the point where project performance is in question.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Safety	A		No exhaust leaks in building. Fuel storage/distribution meets state/local requirement. Fire extinguishers on hand, of sufficient quantity, and properly charged. Safety hardware installed. Required safety items used (hearing, eyes, etc.).	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Safety	M		Minor safety hazards are present, but do not pose an immediate threat to the pumping plant or personnel at the plant. Corrections should be made prior to the next annual inspection.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Safety	U		Safety issues exist that could cause injury or loss of life.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Security Fencing	A		Safety / security fencing is 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.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Security Fencing	M		Safety / security fencing or gates are damaged or corroded but appear to be maintainable. Locks may be missing or damaged.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Security Fencing	U		Safety / security fencing and gates are damaged or corroded to the point that replacement is required, or potentially dangerous project features are not secured.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Security Fencing	N		No safety / security fencing or gates exist or are needed.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sluice / Slide Gates	A		Gates open and close freely with minor leakage. Sill is free of sediment and other obstructions. Gates and lifters have been maintained.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sluice / Slide Gates	M		Gates have been damaged or have deteriorated, and open and close with resistance or binding. Leakage quantity is controllable and is not a threat to project performance. Maintenance is required.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sluice / Slide Gates	U		Gates do not open or close. Gate, stem, lifter and/or guides are damaged or corroded.	Maintenance Deficiency	Maintenance Deficiency

Category	Item	Rating	Comment Code	Rating Description	Default Issue Type	Alternate Issue Type
Pump Stations	Sluice / Slide Gates	N		There are no sluice / slide gates on this plant and are not needed to ensure water does not flow from the channel toward the landside.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sumps/Wet Well	A		Sumps / Wet wells are clear of excessive debris, sediment, or other obstructions. Procedures are in place to move debris accumulation during operation.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sumps/Wet Well	M		Debris, sediment, or other obstructions are present and must be removed, but the sump/wet well will function as intended during the next flood event. Procedures are in place to remove debris accumulation during operation.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Sumps/Wet Well	U		Large debris or excessive silt present which will hinder or damage pumps during operation, or no procedures have been established to remove debris accumulation during operation.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Racks	A		Trash racks are fastened in place and properly maintained.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Racks	M		Trash racks are in place but are unfastened or have bent bars that allow debris to enter into the pipe or pump station. Repair or replacement is required.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Racks	U		Trash rack is missing, damaged or not operational, or deficiencies will inhibit operations during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Rakes	A		Drive chain, bearings, gear reducers, and other components are in good operating condition and are being properly maintained.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Rakes	M		The trash rake is in need of maintenance, but is still operational.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Rakes	U		Trash rake is not operational or deficiencies will inhibit operations during the next flood event.	Maintenance Deficiency	Maintenance Deficiency
Pump Stations	Trash Rakes	N		There are no trash rakes for this pumping plant.	Maintenance Deficiency	Maintenance Deficiency