

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2014 Levee Inspection Results****Brannan Andrus Levee Maintenance District**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2014 Levee Inspection Results

Brannan Andrus Levee Maintenance District

Waterway			Bank	Unit Miles
Unit No. 01 Georgiana Slough			Right	6.02
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/24/2014 - 03/24/2014			
DWR Inspector	Richard Willoughby			
Accompanied By	Gilbert Labrie DCC Engineering Co, Inc			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start		Rating **	M	Issue No.	27
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training				°
					°
DWR ID	DWR_NA0002_01_s _ 2012_27				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	32
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals				°
					°
DWR ID	DWR_NA0002_01_s _ 2013_32				
Action/Comments					

No Photos

LM Start		Rating **	A	Issue No.	33
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment				°
					°
DWR ID	DWR_NA0002_01_s _ 2013_33				
Action/Comments					

No Photos

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	0.00	Rating **	M	Issue No.	50
LM End	6.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation				°
					°
DWR ID	DWR_NA0002_01_s _ 2014_50				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	51
LM End	6.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation				°
					°
DWR ID	DWR_NA0002_01_s _ 2014_51				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.50	Rating **	A/W	Issue No.	1
LM End	0.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.182702 °	38.182198 °
				-121.570497 °	-121.574877 °
DWR ID	DWR_NA0002_01_s _ 2012_1				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Wild roses or berry vines at landside toe.					

Photo 1 of 1 : richard_s_20140318_469.jpg



Looking southwest at wild roses or berry vines on landside toe.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	0.61	Rating **	M	Issue No.	35
LM End	0.61	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.182213 °	38.182213 °
				-121.572356 °	-121.572356 °
DWR ID	DWR_NA0002_01_s _ 2014_35				
Action/Comments					
Inspector Comments: FS_ID:13560					
EP_NO: 2015					
Repair Type:					
Crossing Status:					
UCIP Comments: This pipe appears abandoned and should be removed.					
FIELD_STRUCT_DESC: 2-inch galvanized pipe through levee 2.0 feet below crown. Gas well drain (Permit No. 2015, 1959).					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_893.jpg



Pipe on LS slope.

LM Start	0.75	Rating **	M	Issue No.	37
LM End	0.75	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.182212 °	38.182212 °
				-121.574987 °	-121.574987 °
DWR ID	DWR_NA0002_01_s _ 2014_37				
Action/Comments					
Inspector Comments: FS_ID:15984 EP_NO: 11232 Repair Type: Crossing Status: UCIP Comments: Unable to locate any appurtances other than distro box. Need to verify proper abandonment. FIELD_STRUCT_DESC: 12-inch pipe through levee 3.2 feet below crown. Siphon breaker on landward slope. Concrete distribution box located landward of the toe (ABO No. 11232, 1975). 2" primer valve. Originally included in the 1954 O&M manual. FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_1399.jpg



Concrete distribution box on LS toe.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	1.22	Rating **	M	Issue No.	38
LM End	1.22	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.177669 °	38.177669 °
				-121.580222 °	-121.580222 °
DWR ID	DWR_NA0002_01_s_2014_38				
Action/Comments					
Inspector Comments: FS_ID:13558					
EP_NO: 11234					
Repair Type:					
Crossing Status:					
UCIP Comments: Appears abandoned and should be done so properly.					
FIELD_STRUCT_DESC: 1 of 2: 8-inch steel pipe through levee 4.3 feet					
below crown. Pump in pump house on waterward berm. 60-inch					
diameter concrete standpipe on LS toe (ABO No. 11234, 1975).					
Originally included in the 1954 O&M manual.					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_890.jpg



Concrete standpipe on LS toe.

LM Start	1.54	Rating **	M	Issue No.	39
LM End	1.54	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.173254 °	38.173254 °
				-121.580718 °	-121.580718 °
DWR ID	DWR_NA0002_01_s_2014_39				
Action/Comments					
Inspector Comments: FS_ID:13554					
EP_NO: 11252					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe heavily rusted at distribution box. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 1 of 3: 8-inch steel pipe through levee 4.6 feet below crown. Pump and valve on waterward slope. Siphon breaker in 24-inch CMP riser on LS shoulder. 7'X10'-concrete distribution box at LS toe (ABO No. 11252, 1976). Originally included in the 1954 O&M manual.					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_888.jpg



Pump and pipe at WS toe.

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	1.58	Rating **	M	Issue No.	25
LM End	1.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.170425 °	38.172887 °
				-121.581080 °	-121.580590 °
DWR ID	DWR_NA0002_01_s _ 2012_25				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : richard_s_20140318_488.jpg



Looking southwest at untrimmed tree on landward slope and toe.

LM Start	2.18	Rating **	M	Issue No.	40
LM End	2.18	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.164491 °	38.164491 °
				-121.583943 °	-121.583943 °
DWR ID	DWR_NA0002_01_s _ 2014_40				
Action/Comments					
Inspector Comments: FS_ID:13549 EP_NO: 11252 Repair Type: Crossing Status: UCIP Comments: Pipe rusted through at inlet to box. Good candidate for video inspection. FIELD_STRUCT_DESC: 3 of 3: 12-inch steel pipe through the levee 4.0 feet below the crown. Slant pump on bank. Switch box on berm, conduit through levee. Siphon breaker in 24-inch CMP riser on landward slope. Power pole and electrical panel at landward toe (ABO No. 11252, 1975). 7'X10' concrete distribution box on LS toe. Originally included in the 1954 O&M manual. FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_881.jpg



Slant pump on WS toe.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating	+ Issue Type
A : Acceptable	Ma : Maintenance Deficiency
M : Minimally Acceptable	Ob : Design & System Obsolescence
U : Unacceptable	En : Enforcement
N : Not Inspected/Rated	
C : Corrected	
A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.20	Rating **	A/W	Issue No.	26
LM End	2.22	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.164138 °	38.163797 °
				-121.584078 °	-121.584225 °
DWR ID	DWR_NA0002_01_s _ 2013_26				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Wild rose on landside slope and toe.					

No Photos

LM Start	2.25	Rating **	A/W	Issue No.	6
LM End	2.25	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.163460 °	38.163460 °
				-121.584406 °	-121.584406 °
DWR ID	DWR_NA0002_01_s _ 2012_6				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.29	Rating **	U	Issue No.	36
LM End	2.34	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.162918 °	38.162322 °
				-121.584721 °	-121.585081 °
DWR ID	DWR_NA0002_01_s _ 2012_36				
Action/Comments					
Landscaping					

Photo 1 of 4 : richard_s_20140318_490.jpg



Looking south at dense landscape on waterside and landside of levee.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.29	Rating **	U	Issue No.	36 (cont)	
LM End	2.34	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.162918 °	38.162322 °	
				-121.584721 °	-121.585081 °	
DWR ID	DWR_NA0002_01_s _ 2012_36					
Action/Comments						
Landscaping						

Photo 2 of 4 : richard_s_20140318_491.jpg



Looking west at ground cover on landside slope.

LM Start	2.29	Rating **	U	Issue No.	36 (cont)
LM End	2.34	Issue Type +	En	Location *	LS

Photo 3 of 4 : richard_s_20140318_492.jpg



Looking north at dense vegetation on waterside slope.

LM Start	2.29	Rating **	U	Issue No.	36 (cont)
LM End	2.34	Issue Type +	En	Location *	LS

Photo 4 of 4 : richard_s_20140318_493.jpg



Looking south at dense oleander on waterside shoulder spring 2012

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.30	Rating **	M	Issue No.	3
LM End	2.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.162773 °	38.162773 °
				-121.584767 °	-121.584767 °
DWR ID	DWR_NA0002_01_s _ 2012_3				
Action/Comments					
Firewood					

Photo 1 of 3 : richard_s_20140318_470.jpg



Looking east at firewood on waterside shoulder.

LM Start	2.30	Rating **	M	Issue No.	3 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : richard_s_20140318_471.jpg



Looking south at firewood on waterside shoulder.

LM Start	2.30	Rating **	M	Issue No.	3 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : richard_s_20140318_472.jpg



Looking southeast at firewood on waterside shoulder.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.34	Rating **	M	Issue No.	41
LM End	2.34	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162332 °	38.162332 °
				-121.585032 °	-121.585032 °
DWR ID	DWR_NA0002_01_s _ 2014_41				
Action/Comments					
Inspector Comments: FS_ID:16123					

Photo 1 of 1 : UCIP_1411.jpg



Pipe visible in water at WS toe.

LM Start	2.36	Rating **	M	Issue No.	7
LM End	2.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.162004 °	38.162004 °
				-121.585229 °	-121.585229 °
DWR ID	DWR_NA0002_01_s _ 2012_7				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	2.39	Rating **	M	Issue No.	8
LM End	2.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.161573 °	38.161573 °
				-121.585720 °	-121.585720 °
DWR ID	DWR_NA0002_01_s _ 2013_8				
Action/Comments					
Garbage					

Photo 1 of 1 : richard_s_20140318_475.jpg



Looking northeast at garbage at landward toe.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.43	Rating **	M	Issue No.	56
LM End	2.58	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments				°
					°
DWR ID	DWR_NA0002_01_s_2014_56				
Action/Comments					
Ditch					
Inspector Comments: Ditch has been in place for several year. Ditch should be removed from within fifteen feet of landward toe.					

Photo 1 of 3 : richard_s_20140328_487.jpg



Looking south at ditch within fifteen feet of landward toe.

LM Start	2.43	Rating **	M	Issue No.	56 (cont)
LM End	2.58	Issue Type +	En	Location *	LS

Photo 2 of 3 : richard_s_20140328_488.jpg



Looking north at ditch within fifteen feet of landward toe.

LM Start	2.43	Rating **	M	Issue No.	56 (cont)
LM End	2.58	Issue Type +	En	Location *	LS

Photo 3 of 3 : richard_s_20140328_489.jpg



Looking north at south end of ditch within fifteen feet of landward toe.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.45	Rating **	A/W	Issue No.	28
LM End	2.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.160805 °	38.159235 °
				-121.585782 °	-121.586472 °
DWR ID	DWR_NA0002_01_s _ 2013_28				
Action/Comments					
Remove the wild growth other than native grasses from the levee					

No Photos

LM Start	2.50	Rating **	M	Issue No.	42
LM End	2.50	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.160147 °	38.160147 °
				-121.586087 °	-121.586087 °
DWR ID	DWR_NA0002_01_s _ 2014_42				
Action/Comments					
Inspector Comments: FS_ID:13545					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe appears abandoned and should be done so properly. standpipe on LS is covered in brush.					
FIELD_STRUCT_DESC: 8-inch steel pipe through the levee 3.4 feet below the crown. 6" pump on waterward side. 36-inch concrete standpipe on LS toe. Originally included in the 1954 O&M manual.					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_878.jpg



Pipe and pump on WS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	2.54	Rating **	M	Issue No.	43
LM End	2.54	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.159569 °	38.159569 °
				-121.586339 °	-121.586339 °
DWR ID	DWR_NA0002_01_s _ 2014_43				
Action/Comments					
Inspector Comments: FS_ID:13525					
EP_NO: 17250					
Repair Type:					
Crossing Status:					
UCIP Comments: Needs better location markers.					
FIELD_STRUCT_DESC: 24-inch steel natural-gas pipeline through the					
levee 117-feet below the crown (Permit No. 17250, 2001). Possible					
sign on LS toe.					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_875.jpg



Gasline marker on LS toe.

LM Start	2.60	Rating **	M	Issue No.	44
LM End	2.60	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.158683 °	38.158683 °
				-121.586784 °	-121.586784 °
DWR ID	DWR_NA0002_01_s _ 2014_44				
Action/Comments					
Inspector Comments: FS_ID:13524					
EP_NO: 11238					
Repair Type:					
Crossing Status:					
UCIP Comments: Erosion along pipe at WS toe goes into levee prism. Animal activity appears to be the cause of some pretty heavy erosion damage. Some settlement along the pipe alignment on crown may indicate other problems with this pipe.					
FIELD_STRUCT_DESC: 1 of 5: 12-inch steel pipe through levee 4.0 feet below crown. Siphon breaker on landward shoulder. 7X9-foot concrete distribution box on LS toe (ABO No. 11238, 1975). Originally included in the 1954 O&M manual. (pipe replaced under Permit No. 18549 7/11/2009).					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_870.jpg



Concrete distribution box on LS toe.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	3.00	Rating **	U	Issue No.	55
LM End	3.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation				°
					°
DWR ID	DWR_NA0002_01_s _ 2014_55				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Dense vegetation on landward toe.					

Photo 1 of 1 : richard_s_20140328_490.jpg



Looking north at dense vegetation within fifteen feet of landward toe.

LM Start	3.32	Rating **	A/W	Issue No.	29
LM End	3.35	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.152052 °	38.151683 °
				-121.591500 °	-121.591662 °
DWR ID	DWR_NA0002_01_s _ 2013_29				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Wild roses on landside slope.					

Photo 1 of 1 : richard_s_20140318_489.jpg



Looking south at wild roses on landward slope and toe.

LM Start	3.37	Rating **	M	Issue No.	5
LM End	3.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.151492 °	38.151492 °
				-121.591942 °	-121.591942 °
DWR ID	DWR_NA0002_01_f _ 2013_5				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Remove cactus from waterward slope.					

Photo 1 of 1 : richard_s_20140318_474.jpg



Looking south at cacti on waterward slope near Oxbow Harbor.

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	3.46	Rating **	A/W	Issue No.	30
LM End	3.82	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.151572 °	38.149813 °
				-121.593488 °	-121.598913 °
DWR ID	DWR_NA0002_01_s _ 2013_30				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Willows on waterside slope.					

No Photos

LM Start	3.62	Rating **	A/W	Issue No.	9
LM End	3.62	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.151744 °	38.151744 °
				-121.596425 °	-121.596425 °
DWR ID	DWR_NA0002_01_s _ 2012_9				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.75	Rating **	A/W	Issue No.	22
LM End	3.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.150573 °	38.150573 °
				-121.598352 °	-121.598352 °
DWR ID	DWR_NA0002_01_s _ 2012_22				
Action/Comments					
Tree or limb Inspector Comments: Downed tree on waterside slope.					

No Photos

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	3.93	Rating **	A/W	Issue No.	10
LM End	3.93	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.148379 °	38.148379 °
				-121.599970 °	-121.599970 °
DWR ID	DWR_NA0002_01_s _ 2012_10				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 3 : richard_s_20140318_476.jpg



Looking west at dense vegetation on waterside slope.

LM Start	3.93	Rating **	A/W	Issue No.	10 (cont)
LM End	3.93	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : richard_s_20140318_477.jpg



Looking west at dense vegetation on waterside slope spring 2012.

LM Start	3.93	Rating **	A/W	Issue No.	10 (cont)
LM End	3.93	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : richard_s_20140318_478.jpg



Looking south at dead willows on waterward slope. (Spring 2013)

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	3.93	Rating **	U	Issue No.	11
LM End	3.97	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.148318 °	38.147898 °
				-121.599947 °	-121.600347 °
DWR ID	DWR_NA0002_01_s _ 2012_11				
Action/Comments					
Landscaping					

Photo 1 of 3 : richard_s_20140318_479.jpg



Looking northeast at landscaping on landside slope.

LM Start	3.93	Rating **	U	Issue No.	11 (cont)
LM End	3.97	Issue Type +	En	Location *	LS

Photo 2 of 3 : richard_s_20140318_480.jpg



Looking west at dense landscaping on landside slope.

LM Start	3.93	Rating **	U	Issue No.	11 (cont)
LM End	3.97	Issue Type +	En	Location *	LS

Photo 3 of 3 : richard_s_20140318_481.jpg



Looking south at brushes on landside shoulder and slope.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	3.99	Rating **	M	Issue No.	45
LM End	3.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.147653 °	38.147653 °
				-121.600491 °	-121.600491 °
DWR ID	DWR_NA0002_01_s _ 2014_45				
Action/Comments					
Inspector Comments: FS_ID:13487					

Photo 1 of 1 : UCIP_860.jpg



Pipe visible between two large storm drain pipes on WS.

LM Start	3.99	Rating **	M	Issue No.	46
LM End	3.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.147656 °	38.147656 °
				-121.600521 °	-121.600521 °
DWR ID	DWR_NA0002_01_s _ 2014_46				
Action/Comments					
Inspector Comments: FS_ID:13503					
EP_NO: 5534					
Repair Type:					
Crossing Status:					
UCIP Comments: Pot holes over pipe may indicate internal failure.					
Good candidate for video inspection.					
FIELD_STRUCT_DESC: 22-inch steel discharge pipe through levee 3.0 feet below crown. Siphon breaker on WS shoulder. Pump in channel on landward side (Permit No. 5534, 1966). Replaced a 24-inch pipe at same location.					
FS Date: 5/16/2013					

Photo 1 of 1 : UCIP_862.jpg



Pipe and pumping plant on LS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	4.04	Rating **	M	Issue No.	47
LM End	4.04	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.146985 °	38.146985 °
				-121.601019 °	-121.601019 °
DWR ID	DWR_NA0002_01_s _ 2014_47				
Action/Comments					
Inspector Comments: FS_ID:13483					
EP_NO: 11238					
Repair Type:					
Crossing Status:					
UCIP Comments: Missing cover on concrete sump is an immediate hazard and should be repaired.					
FIELD_STRUCT_DESC: 5 of 5: 8-inch steel pipe through levee 3.7 feet below crown. 5X5-foot concrete spillbox on LS slope (ABO No. 11238, 1975). Originally included in the 1954 O&M manual.					
FS Date: 5/8/2013					

Photo 1 of 1 : UCIP_853.jpg



Pipe at entrance to concrete sump on LS.

LM Start	4.18	Rating **	M	Issue No.	12
LM End	4.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.145094 °	38.144817 °
				-121.601585 °	-121.601477 °
DWR ID	DWR_NA0002_01_s _ 2012_12				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	4.22	Rating **	M	Issue No.	20
LM End	4.28	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.144471 °	38.143652 °
				-121.601381 °	-121.600877 °
DWR ID	DWR_NA0002_01_f_2013_20				
Action/Comments					
Landscape Irrigation					
Inspector Comments: Sprinkler system on waterside of levee.					

Photo 1 of 1 : richard_s_20140318_483.jpg



Looking south at a sprinkler system on waterward slope.

LM Start	4.25	Rating **	M	Issue No.	13
LM End	4.28	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.144134 °	38.143747 °
				-121.601177 °	-121.600924 °
DWR ID	DWR_NA0002_01_s_2012_13				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	4.36	Rating **	M	Issue No.	21
LM End	4.36	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.142838 °	38.142838 °
				-121.600163 °	-121.600163 °
DWR ID	DWR_NA0002_01_s_2012_21				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
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U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	4.63	Rating **	M	Issue No.	48
LM End	4.63	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.139400 °	38.139400 °
				-121.597678 °	-121.597678 °
DWR ID	DWR_NA0002_01_s _ 2014_48				
Action/Comments					
Inspector Comments: FS_ID:13442					
EP_NO: 11237					
Repair Type:					
Crossing Status:					
UCIP Comments: Appears abandoned. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 3 of 3: 6-inch steel pipe through levee 3.6 feet below crown. 42-inch concrete standpipe on LS toe.. (ABO No. 11237, 1975). Originally included in the 1954 O&M manual.					
FS Date: 5/15/2013					

Photo 1 of 1 : UCIP_848.jpg



42-inch concrete riser on LS toe.

LM Start	4.78	Rating **	M	Issue No.	24
LM End	4.78	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.137478 °	38.137472 °
				-121.596512 °	-121.596512 °
DWR ID	DWR_NA0002_01_s _ 2012_24				
Action/Comments					
Garbage					
Inspector Comments: Landowner stockpiling wooden beams on landside shoulder.					

Photo 1 of 1 : richard_s_20140318_487.jpg



Looking northwest at wooden boards on landside shoulder.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	4.98	Rating **	A/W	Issue No.	14
LM End	4.98	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.135158 °	38.135158 °
				-121.594198 °	-121.594198 °
DWR ID	DWR_NA0002_01_s _ 2012_14				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

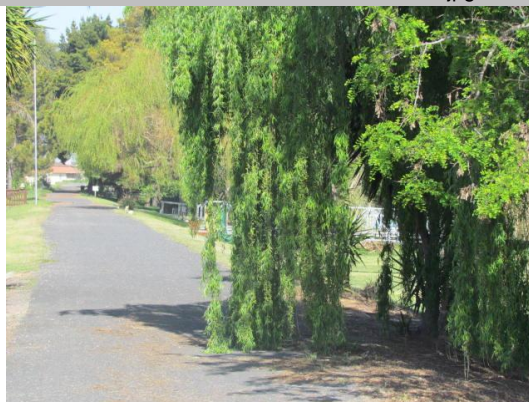
No Photos

LM Start	5.11	Rating **	M	Issue No.	15
LM End	5.11	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.133759 °	38.133759 °
				-121.592598 °	-121.592598 °
DWR ID	DWR_NA0002_01_s _ 2012_15				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	5.17	Rating **	M	Issue No.	31
LM End	5.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.133145 °	38.133145 °
				-121.591895 °	-121.591895 °
DWR ID	DWR_NA0002_01_s _ 2013_31				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

Photo 1 of 1 : richard_s_20140328_491.jpg



Looking north at overhanging tree limbs on landward shoulder.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.25	Rating **	M	Issue No.	16
LM End	5.25	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.132238 °	38.132238 °
				-121.590897 °	-121.590897 °
DWR ID	DWR_NA0002_01_s _ 2012_16				
Action/Comments					
Landscaping					

No Photos

LM Start	5.33	Rating **	M	Issue No.	2
LM End	5.33	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.131327 °	38.131327 °
				-121.589980 °	-121.589980 °
DWR ID	DWR_NA0002_01_s _ 2012_2				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.36	Rating **	M	Issue No.	49
LM End	5.36	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.131048 °	38.131048 °
				-121.589655 °	-121.589655 °
DWR ID	DWR_NA0002_01_s _ 2014_49				
Action/Comments					
Inspector Comments: FS_ID:13090					
EP_NO: 11245					
Repair Type:					
Crossing Status:					
UCIP Comments: Appears abandoned. Pipe at slide gate in riser on LS toe is rusted through.					
FIELD_STRUCT_DESC: 1 of 2: 14-inch steel pipe through levee 3.8 feet below crown (ABO 11245, 1975). 2" primer valve and 48-inch concrete standpipe on LS. Originally included in the 1954 O&M manual.					
FS Date: 5/8/2013					

Photo 1 of 1 : UCIP_799.jpg



Filler pipe and standpipe on LS.

LM Start	5.42	Rating **	A/W	Issue No.	4
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.130355 °	38.130355 °
				-121.588942 °	-121.588942 °
DWR ID	DWR_NA0002_01_s _ 2012_4				
Action/Comments					
Tree or limb					
Inspector Comments: Tree limb on landside slope.					

Photo 1 of 1 : richard_s_20140318_473.jpg



Looking southwest at a downed tree limb on landside slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	54
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees				°
					°
DWR ID	DWR_NA0002_01_s _ 2014_54				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					

No Photos

LM Start	5.46	Rating **	M	Issue No.	23
LM End	5.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.129810 °	38.129325 °
				-121.588218 °	-121.586448 °
DWR ID	DWR_NA0002_01_s _ 2012_23				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Remove vegetation at landside toe.					

Photo 1 of 3 : richard_s_20140318_484.jpg



Looking south at trees, berry vines, and wild rose on landside toe.

LM Start	5.46	Rating **	M	Issue No.	23 (cont)
LM End	5.57	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : richard_s_20140318_485.jpg



Looking south at dense berry vines and trees on the landward slope and toe.

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.46	Rating **	M	Issue No.	23 (cont)	
LM End	5.57	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Vegetation			38.129810 °	38.129325 °	
				-121.588218 °	-121.586448 °	
DWR ID	DWR_NA0002_01_s _ 2012_23					
Action/Comments						
Remove the wild growth other than native grasses from the levee						

Photo 3 of 3 : richard_s_20140318_486.jpg



Looking east at dense vegetation on landward toe.

LM Start	5.64	Rating **	M	Issue No.	18
LM End	5.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.129240 °	38.129252 °
				-121.585328 °	-121.584723 °
DWR ID	DWR_NA0002_01_s _ 2012_18				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Wild roses or berry vines on waterside slope.					

Photo 1 of 1 : richard_s_20140318_482.jpg



Looking south at dense vegetation on waterside slope.

LM Start	5.69	Rating **	A/W	Issue No.	19
LM End	5.69	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.129307 °	38.129307 °
				-121.584253 °	-121.584253 °
DWR ID	DWR_NA0002_01_s _ 2012_19				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Willows on waterside slope					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.72	Rating **	M	Issue No.	53
LM End	5.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments				°
					°
DWR ID	DWR_NA0002_01_s _ 2014_53				
Action/Comments					
Material					
Inspector Comments: Concrete slabs on water ward berm area.					
Possible undermining slab should be removed or broken up in place to meet Title 23 standard for Rip Rap.					

Photo 1 of 4 : richard_s_20140328_492.jpg



Looking north at collapse concrete slab on waterward berm.

LM Start	5.72	Rating **	M	Issue No.	53 (cont)
LM End	5.72	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : richard_s_20140328_493.jpg



Looking south at collapse concrete slab on waterward berm.

LM Start	5.72	Rating **	M	Issue No.	53 (cont)
LM End	5.72	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : richard_s_20140328_494.jpg



Looking north at collapse concrete slab on waterward berm.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.72	Rating **	M	Issue No.	53 (cont)	
LM End	5.72	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments				°	°
					°	°
DWR ID	DWR_NA0002_01_s_2014_53					
Action/Comments						
Material						

Photo 4 of 4 : richard_s_20140328_495.jpg



Looking south at south end of concrete slab on waterward berm.

LM Start	5.74	Rating **	M	Issue No.	34
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.129462 °	38.129608 °
				-121.583337 °	-121.582085 °
DWR ID	DWR_NA0002_01_f_2013_34				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Remove berryvine from waterward slope.					

No Photos

LM Start	5.79	Rating **	M	Issue No.	17
LM End	5.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.129537 °	38.129599 °
				-121.582760 °	-121.582155 °
DWR ID	DWR_NA0002_01_s_2012_17				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Georgiana Slough	Right	6.02	03/24/2014 03/24/2014	Richard Willoughby

LM Start	5.85	Rating **	M	Issue No.	52
LM End	5.85	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			°	°
				°	°
DWR ID	DWR_NA0002_01_s _ 2014_52				
Action/Comments					
Landscaping					
Inspector Comments: Fruit trees on landward toe blocking view.					

Photo 1 of 1 : richard_s_20140328_496.jpg



Looking north at dense vegetation at landward toe.

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2014 Levee Inspection Results

Brannan Andrus Levee Maintenance District

Waterway			Bank	Unit Miles
Unit No. 02 Sacramento River			Left	13.30
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	03/27/2014 - 03/27/2014			
DWR Inspector	Richard Willoughby			
Accompanied By	Gilbert Labrie DCC Engineering Co, Inc			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	97
LM End	10.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.191795 °	38.121738 °
				-121.567960 °	-121.691453 °
DWR ID	DWR_NA0002_02_s _ 2014_97				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.02	Rating **	M	Issue No.	98
LM End	11.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.191742 °	38.107327 °
				-121.568142 °	-121.700114 °
DWR ID	DWR_NA0002_02_s _ 2014_98				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.42	Rating **	M	Issue No.	26
LM End	0.42	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.189212 °	38.189212 °
				-121.574757 °	-121.574757 °
DWR ID	DWR_NA0002_02_s _ 2012_26				
Action/Comments					
Fence					

Photo 1 of 1 : richard_s_20140318_539.jpg



Looking northeast at fence on landward shoulder and slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	0.48	Rating **	M	Issue No.	39
LM End	0.48	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.188872 °	38.188872 °
				-121.575775 °	-121.575775 °
DWR ID	DWR_NA0002_02_f_2013_39				
Action/Comments					
Building					
Inspector Comments: Storage container at landward toe.					

Photo 1 of 1 : richard_s_20140318_549.jpg



Looking east at storage container at landward toe.

LM Start	0.48	Rating **	M	Issue No.	40
LM End	0.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.188871 °	38.188871 °
				-121.575775 °	-121.575775 °
DWR ID	DWR_NA0002_02_f_2013_40				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Berryvines at landward toe.					

No Photos

LM Start	0.67	Rating **	A/W	Issue No.	1
LM End	0.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.187486 °	38.187486 °
				-121.578783 °	-121.578783 °
DWR ID	DWR_NA0002_02_s_2012_1				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	2
LM End	0.83	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.186535 °	38.186103 °
				-121.580395 °	-121.581127 °
DWR ID	DWR_NA0002_02_s _ 2012_2				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 2 : richard_s_20140318_508.jpg



Looking south at dense vegetation on waterside slope.

LM Start	0.78	Rating **	U	Issue No.	2 (cont)
LM End	0.83	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : richard_s_20140328_497.jpg



Looking north at dense vegetation on waterward slope.

LM Start	0.81	Rating **	M	Issue No.	8
LM End	0.83	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.186455 °	38.186215 °
				-121.580712 °	-121.581060 °
DWR ID	DWR_NA0002_02_s _ 2012_8				
Action/Comments					
Landscaping					

Photo 1 of 2 : richard_s_20140318_510.jpg



Landscaping on landside slope blocking view of slope from LM .81 to 0.83.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	0.81	Rating **	M	Issue No.	8 (cont)	
LM End	0.83	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.186455 °		38.186215 °
				-121.580712 °		-121.581060 °
DWR ID	DWR_NA0002_02_s_2012_8					
Action/Comments						
Landscaping						

Photo 2 of 2 : richard_s_20140318_511.jpg



Looking southeast at dense landscaping on landside slope.

LM Start	0.82	Rating **	M	Issue No.	34
LM End	0.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.186199 °	38.186199 °
				-121.580968 °	-121.580968 °
DWR ID	DWR_NA0002_02_s_2014_34				
Action/Comments					

Inspector Comments: FS_ID:12164

EP_NO: 1173

Repair Type:

Crossing Status:

UCIP Comments: Several patches on pipe, walkway in disrepair and 24-inch standpipe for siphon breaker on LS slope has been dislodged from the LS slope and rests at LS toe. Pipe appears to be failing at multiple places due to corrosion.

FIELD_STRUCT_DESC: 2 of 4: 12-inch pipe through levee 7.0 feet below the crown. Pump on pile structure with a walkway in the river.

Siphon breaker in 24-inch CMP riser on LS slope with a 7X9-foot concrete distribution box on LS toe. Service pole on the landward slope with a 1.5-inch galvanized iron electrical conduit at the same location. (Permit No. 1173, 1947). Included in the 1954 O&M manual.

FS Date: 4/18/2013

Photo 1 of 1 : UCIP_541.jpg



Pump and slide gate on WS pier.

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.16	Rating **	M	Issue No.	41
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.182465 °	38.182465 °
				-121.584957 °	-121.584957 °
DWR ID	DWR_NA0002_02_f_2013_41				
Action/Comments					
Garbage Inspector Comments: Trash (sofa) on waterward slope.					

Photo 1 of 1 : richard_s_20140318_550.jpg



Looking southwest at garbage on waterward slope and toe.

LM Start	1.39	Rating **	M	Issue No.	60
LM End	1.39	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.179666 °	38.179666 °
				-121.587109 °	-121.587109 °
DWR ID	DWR_NA0002_02_s_2014_60				
Action/Comments					
Inspector Comments: FS_ID:12165					
EP_NO: 11261					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe abandoned and should be done so properly.					
Pipe open on WS.					
FIELD_STRUCT_DESC: 8-inch pipe through levee 6.5 feet below crown. Pump in pump house on berm. 7'X9' concrete distribution box on LS toe. Service poles on the landward slope with a 1.5-inch galvanized steel electrical conduit at same location (ABO No. 11261, 1975). Originally included in the 1954 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_543.jpg



Pipe and pumphouse on WS berm.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.44	Rating **	M	Issue No.	27
LM End	1.44	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.178950 °	38.178950 °
				-121.587717 °	-121.587717 °
DWR ID	DWR_NA0002_02_s _ 2012_27				
Action/Comments					
Trim trees to at least five feet above ground level. Inspector Comments: Dense vegetation should be trimmed back fifteen feet from landward toe.					

Photo 1 of 2 : richard_s_20140318_540.jpg



Looking southeast at dense trees on landside toe.

LM Start	1.44	Rating **	M	Issue No.	27 (cont)
LM End	1.44	Issue Type +	En	Location *	LS

Photo 2 of 2 : richard_s_20140318_541.jpg



Looking northeast at dense vegetation on landward toe.

LM Start	1.55	Rating **	A/W	Issue No.	43
LM End	1.56	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.174643 °	38.174642 °
				-121.659695 °	-121.659688 °
DWR ID	DWR_NA0002_02_s _ 2012_43				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.59	Rating **	M	Issue No.	35
LM End	1.61	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.177105 °	38.176837 °
				-121.589058 °	-121.589225 °
DWR ID	DWR_NA0002_02_s _ 2012_35				
Action/Comments					
Landscaping					

No Photos

LM Start	1.61	Rating **	M	Issue No.	61
LM End	1.61	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.176874 °	38.176874 °
				-121.589200 °	-121.589200 °
DWR ID	DWR_NA0002_02_s _ 2014_61				
Action/Comments					
Inspector Comments: FS_ID:12183					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe appears abandoned and should be done so properly.					
FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee 5.8 feet below the crown. 3'X3' concrete distribution box at LS toe.					
PVC standpipe at WS toe. Hose bib attachment on pipe at LS toe.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_548.jpg



Concrete distribution box on LS toe.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.64	Rating **	A/W	Issue No.	3
LM End	1.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.176486 °	38.176486 °
				-121.589445 °	-121.589445 °
DWR ID	DWR_NA0002_02_s_2012_3				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	1.80	Rating **	U	Issue No.	45
LM End	1.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.174437 °	38.174153 °
				-121.590786 °	-121.590980 °
DWR ID	DWR_NA0002_02_f_2013_45				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Dense vegetation on landward slope and toe					

Photo 1 of 2 : richard_s_20140318_553.jpg



Looking north at dense vegetation on landward slope and toe.

LM Start	1.80	Rating **	U	Issue No.	45 (cont)
LM End	1.82	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : richard_s_20140318_554.jpg



Looking southeast at dense vegetation on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.80	Rating **	M	Issue No.	46
LM End	1.80	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.174433 °	38.174433 °
				-121.590792 °	-121.590792 °
DWR ID	DWR_NA0002_02_f_2013_46				
Action/Comments					
Building					

Photo 1 of 1 : richard_s_20140318_555.jpg



Looking east at animal pens at landward toe.

LM Start	1.81	Rating **	M	Issue No.	28
LM End	1.81	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.174302 °	38.174302 °
				-121.590863 °	-121.590863 °
DWR ID	DWR_NA0002_02_s_2012_28				
Action/Comments					
Landscaping Inspector Comments: Cactus on landward slope.					

Photo 1 of 1 : richard_s_20140328_498.jpg



Looking northeast at cactus on landward slope and toe.

LM Start	1.83	Rating **	M	Issue No.	54
LM End	1.83	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.174097 °	38.174097 °
				-121.591002 °	-121.591002 °
DWR ID	DWR_NA0002_02_f_2013_54				
Action/Comments					
Tank Inspector Comments: Propane tank on landward slope.					

Photo 1 of 1 : richard_s_20140318_562.jpg



Looking southeast at propane tank on landward slope and toe.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.84	Rating **	A/W	Issue No.	4
LM End	1.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.173905 °	38.173905 °
				-121.591082 °	-121.591082 °
DWR ID	DWR_NA0002_02_s _ 2012_4				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	1.90	Rating **	M	Issue No.	62
LM End	1.90	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.173197 °	38.173197 °
				-121.591552 °	-121.591552 °
DWR ID	DWR_NA0002_02_s _ 2014_62				
Action/Comments					
Inspector Comments: FS_ID:12185					
EP_NO: 11294					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe abandoned on both sides. Pipe should be abandoned properly.					
FIELD_STRUCT_DESC: 6-inch pipe through the levee 6.5 feet below the crown. Pump in pumphouse on the water ward slope. 1-inch galvanized iron steel electrical conduit at same location (ABO No. 11294, 1975). Originally included in the 1954 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_552.jpg



Pumphouse on WS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	1.91	Rating **	U	Issue No.	12
LM End	1.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.173120 °	38.172598 °
				-121.591505 °	-121.591853 °
DWR ID	DWR_NA0002_02_s _ 2012_12				
Action/Comments					
Landscaping					

Photo 1 of 2 : richard_s_20140318_516.jpg



Landscaping on landside slope blocking view of slope from LM 1.91 to 1.95.

LM Start	1.91	Rating **	U	Issue No.	12 (cont)
LM End	1.95	Issue Type +	En	Location *	LS

Photo 2 of 2 : richard_s_20140318_517.jpg



Looking south at dense landscaping on landside slope and toe.

LM Start	2.34	Rating **	M	Issue No.	25
LM End	2.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.167627 °	38.167152 °
				-121.595538 °	-121.595997 °
DWR ID	DWR_NA0002_02_s _ 2012_25				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.42	Rating **	M	Issue No.	63
LM End	2.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.166819 °	38.166819 °
				-121.596590 °	-121.596590 °
DWR ID	DWR_NA0002_02_s _ 2014_63				
Action/Comments					
Inspector Comments: FS_ID:12211					
EP_NO: 11263					
Repair Type:					
Crossing Status:					
UCIP Comments: Further investigation to determine location of pipe should be done. Pumphouse needs to be unlocked to gather additional information.					
FIELD_STRUCT_DESC: 8-inch pipe through levee 3.7 feet below crown. Pump in pump house on the waterward berm (ABO No. 11263, 1975). 30" concrete standpipe landward side. Originally included in the 1954 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_556.jpg



Possible pumphouse on WS shoulder.

LM Start	2.43	Rating **	M	Issue No.	99
LM End	2.43	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.166772 °	38.166772 °
				-121.596667 °	-121.596667 °
DWR ID	DWR_NA0002_02_s _ 2014_99				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Dense willows on landward slope.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.48	Rating **	U	Issue No.	29
LM End	2.48	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.166378 °	38.166378 °
				-121.597570 °	-121.597570 °
DWR ID	DWR_NA0002_02_s _ 2012_29				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 2 : richard_s_20140328_499.jpg



Looking south at dense vegetation on landward slope.

LM Start	2.48	Rating **	U	Issue No.	29 (cont)
LM End	2.48	Issue Type +	En	Location *	LS

Photo 2 of 2 : richard_s_20140328_500.jpg



Looking north at dense vegetation on landward slope.

LM Start	2.54	Rating **	M	Issue No.	64
LM End	2.54	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.165979 °	38.165979 °
				-121.598520 °	-121.598520 °
DWR ID	DWR_NA0002_02_s _ 2014_64				
Action/Comments					
Inspector Comments: FS_ID:12212					

Photo 1 of 1 : UCIP_559.jpg



Concrete tunnel open on both ends.

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.57	Rating **	M	Issue No.	65
LM End	2.57	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.165774 °	38.165774 °
				-121.599048 °	-121.599048 °
DWR ID	DWR_NA0002_02_s _ 2014_65				
Action/Comments					
Inspector Comments: FS_ID:12213					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: tunnel should be abandoned properly.					
FIELD_STRUCT_DESC: *Abandoned* 4.0 x 4.0-foot open concrete culvert through levee 6.5-inches below the crown. Originally included in the 1954 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_561.jpg



Concrete tunnel on LS shoulder.

LM Start	2.59	Rating **	M	Issue No.	58
LM End	2.63	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.165945 °	38.165498 °
				-121.599345 °	-121.600080 °
DWR ID					
Action/Comments					
Inspector Comments: 2009 - Short reach of vertical bank at the toe. 2010 - Large tree is getting ready to fall in. 2013: No observed changes. [2013 Site ID: SAC_18-1_L]					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.66	Rating **	M	Issue No.	38
LM End	2.74	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.165303 °	38.164682 °
				-121.600477 °	-121.601804 °
DWR ID					
Action/Comments					
Inspector Comments: 2009 - Large scallop from rotational failure. One fallen tree and one large tree with half of its root structure exposed. 2013: No observed changes. [2013 Site ID: SAC_18-0_L]					

Photo 1 of 2 : USACE2013A_SAC_18-0_L_11.jpg



USACE 2013 Photo #1

LM Start	2.66	Rating **	M	Issue No.	38 (cont)
LM End	2.74	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : USACE2013A_SAC_18-0_L_12.jpg



USACE 2013 Photo #2

LM Start	2.76	Rating **	M	Issue No.	66
LM End	2.76	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.164432 °	38.164432 °
				-121.601918 °	-121.601918 °
DWR ID	DWR_NA0002_02_s_2014_66				
Action/Comments					
Inspector Comments: FS_ID:12214					

Photo 1 of 1 : UCIP_563.jpg



Pipe on pier at WS.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.84	Rating **	M	Issue No.	67
LM End	2.84	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.163850 °	38.163850 °
				-121.603317 °	-121.603317 °
DWR ID	DWR_NA0002_02_s _ 2014_67				
Action/Comments					
Inspector Comments: FS_ID:12216					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Tunnel open on both ends and should be abandoned properly.					
FIELD_STRUCT_DESC: *Abandoned* 4'X6' open concrete culvert through levee 1.0 foot below the crown. Originally included in the 1954 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_568.jpg



Entrance to tunnel on LS slope.

LM Start	2.90	Rating **	M	Issue No.	68
LM End	2.90	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.163475 °	38.163475 °
				-121.604221 °	-121.604221 °
DWR ID	DWR_NA0002_02_s _ 2014_68				
Action/Comments					
Inspector Comments: FS_ID:12217					
EP_NO: 11269					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe needs to be abandoned properly if it is truly abandoned.					
FIELD_STRUCT_DESC: 8-inch pipe through levee 8.7 feet below crown. Pump in pump house on the waterward slope. Slide gate in pumphouse. Pipe not visible on LS. (ABO No. 11269,1975). Originally included in the 1959 O&M manual.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_571.jpg



Pumphouse on WS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.91	Rating **	M	Issue No.	69
LM End	2.91	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.163413 °	38.163413 °
				-121.604399 °	-121.604399 °
DWR ID	DWR_NA0002_02_s _ 2014_69				
Action/Comments					
Inspector Comments: FS_ID:16005					
EP_NO: 14173					
Repair Type:					
Crossing Status:					
UCIP Comments: If pipe is still in use it should be marked properly on levee.					
FIELD_STRUCT_DESC: 12-inch telephone conduit through levee 2.0 feet below crown and under channel (Permit No. 14173, 1985). Four 4-inch galvanized iron conductor pipe sleeved through it. Sign on WS slope of levee across river provides location for this crossing.					
FS Date: 4/18/2013					

Photo 1 of 1 : UCIP_1400.jpg



Sign on opposite side of river provides indication of pipe location.

LM Start	2.93	Rating **	M	Issue No.	30
LM End	3.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.163317 °	38.162707 °
				-121.604813 °	-121.608262 °
DWR ID	DWR_NA0002_02_s _ 2012_30				
Action/Comments					
Urban					

Photo 1 of 2 : richard_s_20140318_542.jpg



Looking south at urban encroachments on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	2.93	Rating **	M	Issue No.	30 (cont)
LM End	3.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.163317 °	38.162707 °
				-121.604813 °	-121.608262 °
DWR ID	DWR_NA0002_02_s _ 2012_30				
Action/Comments					
Urban					

Photo 2 of 2 : richard_s_20140318_543.jpg



Looking north at urban encroachments on landward slope and toe.

LM Start	2.99	Rating **	M	Issue No.	70
LM End	2.99	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.163063 °	38.163063 °
				-121.605799 °	-121.605799 °
DWR ID	DWR_NA0002_02_s _ 2014_70				
Action/Comments					
Inspector Comments: FS_ID:12724					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe should be abandoned properly.					
FIELD_STRUCT_DESC: *Abandoned* 6-inch pipe through levee 4.5 feet below crown. Originally included in the 1959 O&M manual. Pipe visible at foundation on WS shoulder.					
FS Date: 4/24/2013 10:00:00 AM					

Photo 1 of 1 : UCIP_706.jpg



Foundation on WS shoulder.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.17	Rating **	M	Issue No.	5
LM End	3.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.162638 °	38.162638 °
				-121.609068 °	-121.609068 °
DWR ID	DWR_NA0002_02_s _ 2012_5				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

Photo 1 of 1 : richard_s_20140318_509.jpg



Looking south at overhanging tree on waterside shoulder.

LM Start	3.20	Rating **	A/W	Issue No.	6
LM End	3.20	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.162643 °	38.162643 °
				-121.609616 °	-121.609616 °
DWR ID	DWR_NA0002_02_s _ 2012_6				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	3.22	Rating **	M	Issue No.	7
LM End	3.22	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.162609 °	38.162609 °
				-121.609979 °	-121.609979 °
DWR ID	DWR_NA0002_02_s _ 2012_7				
Action/Comments					
Landscaping					

Photo 1 of 1 : richard_s_20140328_501.jpg



Looking south at overgrown landscaping on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.29	Rating **	M	Issue No.	71
LM End	3.29	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162430 °	38.162430 °
				-121.611248 °	-121.611248 °
DWR ID	DWR_NA0002_02_s _ 2014_71				
Action/Comments					
Inspector Comments: FS_ID:15966					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine disposition and use of pipe.					
FIELD_STRUCT_DESC: 4-inch cast iron pipe through the levee 8-feet					
below the crown. Pipe visible next to foundation on LS toe.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_1398.jpg



Pipe visible next to foundation on LS slope.

LM Start	3.31	Rating **	M	Issue No.	72
LM End	3.31	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162378 °	38.162378 °
				-121.611656 °	-121.611656 °
DWR ID	DWR_NA0002_02_s _ 2014_72				
Action/Comments					
Inspector Comments: FS_ID:15967					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Only USAA paint on pavement. Gasline should be permanently marked.					
FIELD_STRUCT_DESC: Gas line markers on pavement.					
FS Date: 4/24/2013					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.38	Rating **	M	Issue No.	73
LM End	3.38	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162387 °	38.162387 °
				-121.612847 °	-121.612847 °
DWR ID	DWR_NA0002_02_s _ 2014_73				
Action/Comments					
Inspector Comments: FS_ID:12745					
EP_NO: 11266					
Repair Type:					
Crossing Status:					
UCIP Comments: This pipe has been abandoned and should be abandoned properly. Pumphouse has colapsed.					
FIELD_STRUCT_DESC: 6-inch pipe through levee 4.5 feet below crown. Pump in pump house on the water ward side (ABO No. 11266, 1975).					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_709.jpg



Pipe and wrecked pumphouse on WS toe.

LM Start	3.40	Rating **	M	Issue No.	100
LM End	3.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.162394 °	38.162432 °
				-121.613146 °	-121.613637 °
DWR ID	DWR_NA0002_02_s _ 2014_100				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

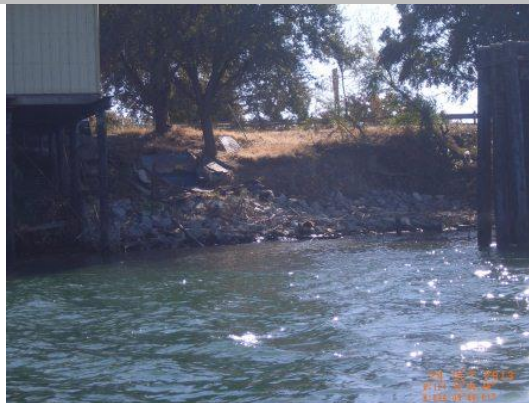
Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.40	Rating **	U	Issue No.	37
LM End	3.57	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.162641 °	38.162828 °
				-121.612800 °	-121.616263 °
DWR ID					
Action/Comments					
Inspector Comments: 2009 - Fluvial erosion, into the levee slope, close to vertical bank with roadway on top. Pilings that were once at the bankline are now 30 ft out. 2010 - Very steep slope with slumps and overturned trees. 2011 - Upgraded to CRITICAL. Sections of vertical slope with highway on top. Heavy vegetation in front of most of the erosion pockets. Structures built into the levee on the upstream end. 2012 - Site continues to worsen. 2013: Some rock added on the upstream end, but site remains critical. [2013 Site ID: SAC 17-2 L]					

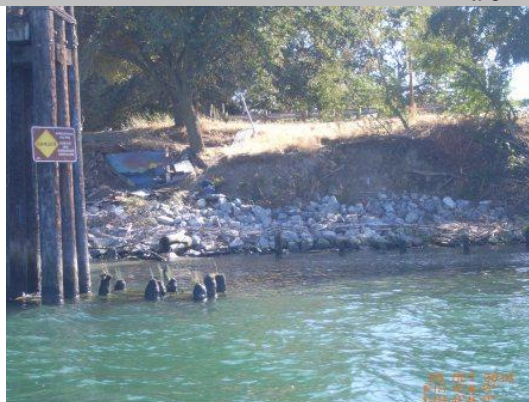
Photo 1 of 2 : USACE2013A_SAC_17-2_L_1.jpg



USACE 2013 Photo #1

LM Start	3.40	Rating **	U	Issue No.	37 (cont)
LM End	3.57	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : USACE2013A_SAC_17-2_L_3.jpg



USACE 2013 Photo #2

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.44	Rating **	M	Issue No.	74
LM End	3.44	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162473 °	38.162473 °
				-121.613963 °	-121.613963 °
DWR ID	DWR_NA0002_02_s _ 2014_74				
Action/Comments					
Inspector Comments: FS_ID:12746					

Photo 1 of 1 : UCIP_710.jpg



Pipe and pump on WS toe.

LM Start	3.47	Rating **	M	Issue No.	101
LM End	3.53	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.162492 °	38.162600 °
				-121.614521 °	-121.615667 °
DWR ID	DWR_NA0002_02_s _ 2014_101				
Action/Comments					
Landscaping					

No Photos

LM Start	3.53	Rating **	M	Issue No.	22
LM End	3.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.162590 °	38.162728 °
				-121.615345 °	-121.616622 °
DWR ID	DWR_NA0002_02_s _ 2012_22				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.67	Rating **	M	Issue No.	75
LM End	3.67	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.162908 °	38.162908 °
				-121.618075 °	-121.618075 °
DWR ID	DWR_NA0002_02_s_2014_75				
Action/Comments					
Inspector Comments: FS_ID:12747					
EP_NO: 13462					
Repair Type:					
Crossing Status:					
UCIP Comments: Possible sinkhole over pipe on WS shoulder. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 16-inch pipe through levee 2.5 feet below crown (Permit No. 13462, 1982). Connected to an existing 42" concrete pipe sump. Replaces a pipe that was grouted in place.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_716.jpg



Pump and sump on LS toe.

LM Start	3.67	Rating **	U	Issue No.	55
LM End	3.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.162855 °	38.162855 °
				-121.618114 °	-121.618114 °
DWR ID	DWR_NA0002_02_f_2013_55				
Action/Comments					
Pipe					
Inspector Comments: Landowner is repairing a pipe (Permit # 1615) without authorization from CVFPB. The excavation next to ramp is four to five feet deep and three to four feet wide. Landowner needs to ensure the hole is backfilled properly.					

Photo 1 of 3 : richard_s_20140318_563.jpg



Looking east at excavation on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.67	Rating **	U	Issue No.	55 (cont)
LM End	3.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.162855 °	38.162855 °
				-121.618114 °	-121.618114 °
DWR ID	DWR_NA0002_02_f_2013_55				
Action/Comments					
Pipe					
Inspector Comments: Landowner is repairing a pipe (Permit # 1615) without authorization from CVFPB. The excavation next to ramp is four to five feet deep and three to four feet wide. Landowner needs to ensure the hole is backfilled properly.					

Photo 2 of 3 : richard_s_20140318_564.jpg



Looking southeast at excavation on landward slope next to ramp.

Photo 3 of 3 : richard_s_20140318_565.jpg



Looking south at excavation on landward slope.

LM Start	3.67	Rating **	U	Issue No.	55 (cont)
LM End	3.67	Issue Type +	Ma	Location *	LS

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.67	Rating **	U	Issue No.	23
LM End	3.74	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.162959 °	38.163334 °
				-121.617323 °	-121.619312 °
DWR ID					
Action/Comments					
Inspector Comments: 2008 - Overstepped levee section with pocket					

Photo 1 of 1 : USACE2013A_SAC_16-8_L_5.jpg



USACE 2013 Photo #1

LM Start	3.71	Rating **	M	Issue No.	76
LM End	3.71	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.163048 °	38.163048 °
				-121.618839 °	-121.618839 °
DWR ID	DWR_NA0002_02_s_2014_76				
Action/Comments					
Inspector Comments: FS_ID:12748					
EP_NO: 1615					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe abandoned and should be abandoned properly.					
FIELD_STRUCT_DESC: 8-inch pipe through levee 7.7 feet below crown. 6'X6' concrete distribution box on LS toe (Permit No. 1615, 1959). Included in the 1959 O&M manual.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_718.jpg



Concrete distribution box on LS toe.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	3.93	Rating **	M	Issue No.	77
LM End	3.93	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.164063 °	38.164063 °
				-121.622650 °	-121.622650 °
DWR ID	DWR_NA0002_02_s _ 2014_77				
Action/Comments					
Inspector Comments: FS_ID:12752					
EP_NO: 11287					
Repair Type:					
Crossing Status:					
UCIP Comments: Aging pipe with repair on WS slope. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 5-inch pipe through levee 5.5 feet below crown. Pump in pump house on the landward side (ABO No. 11287, 1959). Shutoff vlave in pumphouse on LS toe. Originally included in the 1959 O&M manual.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_721.jpg



Pipe and pumphouse on LS.

LM Start	3.97	Rating **	M	Issue No.	102
LM End	3.97	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.164246 °	38.164246 °
				-121.623272 °	-121.623272 °
DWR ID	DWR_NA0002_02_s _ 2014_102				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	4.01	Rating **	M	Issue No.	31
LM End	4.01	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.164470 °	38.164470 °
				-121.624012 °	-121.624012 °
DWR ID	DWR_NA0002_02_s _ 2012_31				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	4.04	Rating **	U	Issue No.	59
LM End	4.15	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.164498 °	38.165167 °
				-121.624343 °	-121.626273 °
DWR ID	DWR_NA0002_02_s _ 2012_59				
Action/Comments					
Landscaping					

Photo 1 of 1 : richard_s_20140318_569.jpg



Looking south at dense landscaping on landward slope.

*** Location**
LS : Land Side
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	4.06	Rating **	M	Issue No.	78
LM End	4.06	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.164727 °	38.164727 °
				-121.624869 °	-121.624869 °
DWR ID	DWR_NA0002_02_s _ 2014_78				
Action/Comments					
Inspector Comments: FS_ID:12764					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine disposition of this crossing.					
FIELD_STRUCT_DESC: 4x4-foot concrete tunnel through levee 5.0					
feet below crown. Originally included in the 1959 O&M manual.					
FS Date: 4/24/2013					

No Photos

LM Start	4.12	Rating **	M	Issue No.	79
LM End	4.12	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.165016 °	38.165016 °
				-121.625834 °	-121.625834 °
DWR ID	DWR_NA0002_02_s _ 2014_79				
Action/Comments					
Inspector Comments: FS_ID:12768					
EP_NO: 787					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe may be abandoned and should be done so properly if not being used. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 2 of 2: 14-inch steel irrigation pipe through levee 4.2 feet below crown. Pump on pile structure in stream (Permit No. 787, 1939). Included in the 1959 O&M manual.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_725.jpg



Pump on concrete pier on WS toe.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	4.47	Rating **	A/W	Issue No.	32
LM End	4.47	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.167135 °	38.167135 °
				-121.631662 °	-121.631662 °
DWR ID	DWR_NA0002_02_s _ 2012_32				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	4.49	Rating **	M	Issue No.	80
LM End	4.49	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.167174 °	38.167174 °
				-121.631927 °	-121.631927 °
DWR ID	DWR_NA0002_02_s _ 2014_80				
Action/Comments					
Inspector Comments: FS_ID:16010					
EP_NO: 11274					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe abandoned and should be abandoned properly if not already done so.					
FIELD_STRUCT_DESC: 2 of 2: 10-inch pipe through levee 6.6 feet below crown. Pump in pump house on the landward slope (ABO No. 11274,1975). Originally included in the 1959 O&M manual.					
Pumphouse not visible 4/24/2013.					
FS Date: 4/24/2013					

Photo 1 of 1 : UCIP_1403.jpg



Abandoned pipe on LS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	4.59	Rating **	A/W	Issue No.	53
LM End	4.59	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.167650 °	38.167650 °
				-121.633770 °	-121.633770 °
DWR ID	DWR_NA0002_02_s _ 2013_53				
Action/Comments					
Tree or limb					
Inspector Comments: Broken tree limb on landside slope and toe.					

Photo 1 of 1 : richard_s_20140318_561.jpg



Looking northeast at broken tree limb on landward slope and toe.

LM Start	4.80	Rating **	M	Issue No.	81
LM End	4.80	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.168744 °	38.168744 °
				-121.637154 °	-121.637154 °
DWR ID	DWR_NA0002_02_s _ 2014_81				
Action/Comments					
Inspector Comments: FS_ID:12773					
EP_NO: 11285					
Repair Type:					
Crossing Status:					
UCIP Comments: Pit under pipe on WS shoulder - possible leak.					
Excavation of pipe on LS slope into levee prism.					
FIELD_STRUCT_DESC: 20-inch pipe sleeved through a 22-inch					
sleeved through a 24-inch pipe through levee 3-feet below the crown.					
Pump on landward side (ABO No. 11285, 1975). Small pump on LS					
shoulder and a 7'X9' concrete sump on the LS toe. Originally included					
in the 1959 O&M manual.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_726.jpg



Pipe on LS slope with excavation in levee prism.

* Location LS : Land Side WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain			

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	4.84	Rating **	M	Issue No.	82
LM End	4.84	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.168887 °	38.168887 °
				-121.637957 °	-121.637957 °
DWR ID	DWR_NA0002_02_s _ 2014_82				

Action/Comments

Inspector Comments: FS_ID:12774

EP_NO: 724

Repair Type:

Crossing Status:

UCIP Comments: Pipe open on waterside at fallen down pumphouse.

Pipe abandoned. Service pole on LS slope down on ground near

broken standpipe. Pipe needs to be properly abandoned.

FIELD_STRUCT_DESC: 10-inch pipe through levee 3.8 feet below crown. Pump in pumphouse on the water ward slope. Service pole on the landward slope (Permit No. 724, 1937). Replaces a 10-inch pipe approx. same location. 32-inch concrete standpipe on LS toe. 1.5-inch electrical conduit runs parallel to 10-inch pipe. Included in the 1959 O&M manual.

FS Date: 5/2/2013

Photo 1 of 1 : UCIP_733.jpg



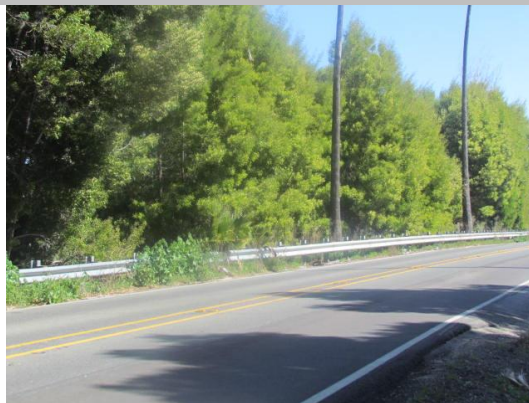
Broken down pumphouse on WS slope.

LM Start	5.19	Rating **	U	Issue No.	9
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.171878 °	38.171800 °
				-121.645552 °	-121.647447 °
DWR ID	DWR NA0002 02 s 2012 9				

Action/Comments

Trim trees to at least five feet above ground level.

Photo 1 of 3 : richard_s_20140318_512.jpg



Looking southeast at dense trees on landside slope and toe.

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	5.19	Rating **	U	Issue No.	9 (cont)
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.171878 °	38.171800 °
				-121.645552 °	-121.647447 °
DWR ID	DWR_NA0002_02_s _ 2012_9				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 2 of 3 : richard_s_20140318_513.jpg



Looking west at dense trees on waterward should and slope.

LM Start	5.19	Rating **	U	Issue No.	9 (cont)
LM End	5.43	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : richard_s_20140318_514.jpg



Looking northwest at dense trees on waterward shoulder and slope.

LM Start	5.41	Rating **	M	Issue No.	56
LM End	5.41	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.171850 °	38.171850 °
				-121.647000 °	-121.647000 °
DWR ID	DWR_NA0002_02_f _ 2013_56				
Action/Comments					
Fence					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	83
LM End	5.42	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.171824 °	38.171824 °
				-121.647265 °	-121.647265 °
DWR ID	DWR_NA0002_02_s _ 2014_83				
Action/Comments					
Inspector Comments: FS_ID:12776					
EP_NO: 7089A					
Repair Type:					
Crossing Status:					
UCIP Comments: Hole at LS toe over pipe possible sign of leakage.					
FIELD_STRUCT_DESC: 7-inch pipe through levee 13.0 feet below crown. Pump in pump house on the landward side. 1.5-inch galvanized steel electrical conduit at same location. 4'X6' concrete distribution box off LS toe next to pumphouse. Originally included in the 1959 O&M manual.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_737.jpg



Pumphouse with gate valve off LS toe.

LM Start	5.59	Rating **	A/W	Issue No.	10
LM End	5.59	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.172019 °	38.172019 °
				-121.650327 °	-121.650327 °
DWR ID	DWR_NA0002_02_s _ 2012_10				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	5.66	Rating **	M	Issue No.	11
LM End	5.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.172308 °	38.172497 °
				-121.651552 °	-121.652243 °
DWR ID	DWR_NA0002_02_s _ 2012_11				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

Photo 1 of 1 : richard_s_20140328_502.jpg



LM Start	5.68	Rating **	M	Issue No.	21
LM End	5.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.172580 °	38.172733 °
				-121.651821 °	-121.652499 °
DWR ID					
Action/Comments					
Inspector Comments: 2009 - Tension cracks on road on top of levee. Erosion into the levee slope with large mass failure scallop. 2010 - Site extended further upstream to account for additional erosion. Very steep slope with slumping. 2013: No observed changes. [2013 Site ID: SAC_15-0_L]					

Photo 1 of 1 : USACE2013A_SAC_15-0_L_5.jpg



USACE 2013 Photo #1

LM Start	5.68	Rating **	M	Issue No.	36
LM End	5.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.172388 °	38.172512 °
				-121.651892 °	-121.652322 °
DWR ID	DWR_NA0002_02_s _ 2012_36				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	5.70	Rating **	M	Issue No.	51
LM End	5.70	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.172442 °	38.172442 °
				-121.652182 °	-121.652182 °
DWR ID	DWR_NA0002_02_s _ 2013_51				
Action/Comments					
Building					
Inspector Comments: Tool shed and animal pen at landside toe.					

Photo 1 of 1 : richard_s_20140318_560.jpg



Looking east tool shed and animal corral on landward slope and toe.

LM Start	5.70	Rating **	M	Issue No.	52
LM End	5.70	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.172457 °	38.172457 °
				-121.652188 °	-121.652188 °
DWR ID	DWR_NA0002_02_s _ 2013_52				
Action/Comments					
Landscaping					
Inspector Comments: Remove cactus from landside slope.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	5.79	Rating **	M	Issue No.	84
LM End	5.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.172940 °	38.172940 °
				-121.653700 °	-121.653700 °
DWR ID	DWR_NA0002_02_s _ 2014_84				
Action/Comments					
Inspector Comments: FS_ID:12778					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe abandoned. Erosion on WS slope at location where pipe should be.					
FIELD_STRUCT_DESC: 12-inch pipe through levee 13.0 feet below crown. Pump and gate valve in pumphouse at landside toe. 1.5-inch electrical conduit along pipe at same location. 42-inch concrete stand pipe at LS toe. Concrete standpipe at landside toe.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_743.jpg



Pump on LS toe.

LM Start	5.82	Rating **	A/W	Issue No.	13
LM End	6.15	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.173130 °	38.174559 °
				-121.654285 °	-121.659867 °
DWR ID	DWR_NA0002_02_s _ 2012_13				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 1 : richard_s_20140318_518.jpg



Looking southeast at compliant vegetation on landside slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	6.22	Rating **	M	Issue No.	85
LM End	6.22	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.174308 °	38.174308 °
				-121.661105 °	-121.661105 °
DWR ID	DWR_NA0002_02_s _ 2014_85				
Action/Comments					
Inspector Comments: FS_ID:12779					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Unable to locate due to excessive vegetation.					
FIELD_STRUCT_DESC: *Abandoned* 8-inch pipe through levee at low elevation.					
FS Date: 5/2/2013					

No Photos

LM Start	6.29	Rating **	U	Issue No.	50
LM End	6.29	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.173922 °	38.173922 °
				-121.662272 °	-121.662272 °
DWR ID	DWR_NA0002_02_s _ 2013_50				
Action/Comments					
Landscaping					

Photo 1 of 2 : richard_s_20140318_558.jpg



Looking north at dense landscaping on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	6.29	Rating **	U	Issue No.	50 (cont)
LM End	6.29	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.173922 °	38.173922 °
				-121.662272 °	-121.662272 °
DWR ID	DWR_NA0002_02_s _ 2013_50				
Action/Comments					
Landscaping					

Photo 2 of 2 : richard_s_20140318_559.jpg



Looking south at dense landscaping on landward slope.

LM Start	6.35	Rating **	M	Issue No.	14
LM End	6.38	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.173586 °	38.173391 °
				-121.663297 °	-121.663786 °
DWR ID	DWR_NA0002_02_s _ 2012_14				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	6.82	Rating **	U	Issue No.	42
LM End	6.82	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.169008 °	38.169008 °
				-121.669420 °	-121.669420 °
DWR ID	DWR_NA0002_02_s _ 2012_42				
Action/Comments					
Fence					

Photo 1 of 1 : richard_s_20140318_551.jpg



Brick wall on landside shoulder at LM 6.82.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	7.00	Rating **	M	Issue No.	20
LM End	7.09	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.166583 °	38.165794 °
				-121.670684 °	-121.671014 °
DWR ID					
Action/Comments					
Inspector Comments: 2011 - Large section of bank slumped off. 2013: No observed changes. [2013 Site ID: SAC_13-6_L]					

Photo 1 of 1 : USACE2013A_SAC_13-6_L_2.jpg



USACE 2013 Photo #1

LM Start	7.04	Rating **	M	Issue No.	86
LM End	7.04	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.165949 °	38.165949 °
				-121.670638 °	-121.670638 °
DWR ID	DWR_NA0002_02_s_2014_86				
Action/Comments					
Inspector Comments: FS_ID:16011					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe open on WS.					
FIELD_STRUCT_DESC: *Abandoned* 8-inch pipe through levee 8.7 feet below crown. Pipe measures 8-inch Inside diameter and 10-inch outside diameter. 5'X5' Concrete distribution box on landside toe. Originally included in the 1959 O&M manual.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_1405.jpg



Pipe open on WS slope.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	7.47	Rating **	M	Issue No.	87
LM End	7.47	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.160387 °	38.160387 °
				-121.673972 °	-121.673972 °
DWR ID	DWR_NA0002_02_s _ 2014_87				
Action/Comments					
Inspector Comments: FS_ID:12814					
EP_NO: 11293					
Repair Type:					
Crossing Status:					
UCIP Comments: Erosion or sinkhole on WS shoulder. Does not appear to be an immediate threat.					
FIELD_STRUCT_DESC: 2 of 2: 16-inch pipe through levee 7.1 feet below crown. Pump on the landward slope. Service pole on the landward slope. 72-inch Concrete standpipe at toe of landward slope (ABO No. 11293, 1975). Originally included in the 1959 O&M manual.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_776.jpg



Pipe and pump on LS shoulder.

LM Start	7.51	Rating **	M	Issue No.	88
LM End	7.51	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.159940 °	38.159940 °
				-121.674429 °	-121.674429 °
DWR ID	DWR_NA0002_02_s _ 2014_88				
Action/Comments					
Inspector Comments: FS_ID:12817					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Pipe should be abandoned properly.					
FIELD_STRUCT_DESC: 3-inch pipe through levee 7.7 feet below crown. Inactive service pole on the landward slope.					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_780.jpg



3.5-inch galvanized iron pipe on LS slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
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C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	7.60	Rating **	M	Issue No.	89
LM End	7.60	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.158990 °	38.158990 °
				-121.675374 °	-121.675374 °
DWR ID	DWR_NA0002_02_s _ 2014_89				
Action/Comments					
Inspector Comments: FS_ID:12822					
EP_NO: 1663					
Repair Type:					
Crossing Status:					
UCIP Comments:					
FIELD_STRUCT_DESC: 14-inch pipe through levee 4.4 feet below crown. A 12-inch pipe is sleeved through the 14-inch and then a 6-inch pipe is sleeved through the 12-inch. Siphon breaker in 24-inch CMP standpipe on LS shoulder. 48-inch diameter concrete standpipe on LS toe. (Permit No. 1663,15429 1959).					
FS Date: 5/2/2013					

Photo 1 of 1 : UCIP_785.jpg



Concrete standpipe on LS toe.

LM Start	7.63	Rating **	A/W	Issue No.	49
LM End	7.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.157930 °	38.157930 °
				-121.675528 °	-121.675528 °
DWR ID	DWR_NA0002_02_s _ 2013_49				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	7.66	Rating **	A/W	Issue No.	24
LM End	7.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.157055 °	38.157055 °
				-121.675445 °	-121.675445 °
DWR ID	DWR_NA0002_02_s _ 2012_24				
Action/Comments					
Prunings					

Photo 1 of 2 : richard_s_20140318_537.jpg



Looking west at prunings on landside toe.

LM Start	7.66	Rating **	A/W	Issue No.	24 (cont)
LM End	7.66	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : richard_s_20140318_538.jpg



Looking south at prunings on landside toe.

LM Start	7.95	Rating **	M	Issue No.	90
LM End	7.95	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.155494 °	38.155494 °
				-121.679988 °	-121.679988 °
DWR ID	DWR_NA0002_02_s _ 2014_90				
Action/Comments					
Inspector Comments: FS_ID:12869					

Photo 1 of 1 : UCIP_787.jpg



Pumphouse and pipe on WS slope.

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	8.17	Rating **	M	Issue No.	91
LM End	8.17	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.152550 °	38.152550 °
				-121.681560 °	-121.681560 °
DWR ID	DWR_NA0002_02_s _ 2014_91				
Action/Comments					
Inspector Comments: FS_ID:16143					
EP_NO: 8661					
Repair Type:					
Crossing Status:					
UCIP Comments: Dip in crown over alignment of pipe. Good candidate for video inspection.					
FIELD_STRUCT_DESC: 8-inch pipe through levee 3.7 feet below crown. Pump in pump house on the landward slope. Service pole and 30-inch concrete standpipe at the landward toe (ABO No. 8661, 1972). Originally included in the 1959 O&M.					
FS Date: 5/3/2013					

Photo 1 of 1 : UCIP_1413.jpg



Pumphouse with concrete standpipe in background on LS toe.

LM Start	8.20	Rating **	M	Issue No.	103
LM End	8.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.152089 °	38.152089 °
				-121.681404 °	-121.681404 °
DWR ID	DWR_NA0002_02_s _ 2014_103				
Action/Comments					
Pipe					
Inspector Comments: Disgarded steel pipe on landward slope.					

Photo 1 of 1 : richard_s_20140328_503.jpg



Looking southwest at disgarded irrigation pipe on landward slope.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	8.26	Rating **	M	Issue No.	19
LM End	8.50	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.151867 °	38.148711 °
				-121.682201 °	-121.682790 °
DWR ID					
Action/Comments					
Inspector Comments: 2010 - Small inlet area behind a man-built spit. Bank is slumping and could possibly be fixed with maintenance. 2011 - Site continues to worsen. 2013: No observed changes. [2013 Site ID: SAC_12-1 L]					

Photo 1 of 1 : USACE2013A_SAC_12-1_L_1.jpg



USACE 2013 Photo #1

LM Start	8.35	Rating **	M	Issue No.	44
LM End	8.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.150112 °	38.144977 °
				-121.682305 °	-121.683345 °
DWR ID	DWR_NA0002_02_s_2012_44				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : richard_s_20140318_552.jpg



Looking southeast at trees on landside shoulder and slope.

LM Start	8.42	Rating **	M	Issue No.	57
LM End	8.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.149000 °	38.149000 °
				-121.682479 °	-121.682479 °
DWR ID	DWR_NA0002_02_f_2013_57				
Action/Comments					
Tree or limb Inspector Comments: Tree limbs on waterward slope.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	8.46	Rating **	M	Issue No.	33
LM End	8.46	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.148323 °	38.148323 °
				-121.682548 °	-121.682548 °
DWR ID	DWR_NA0002_02_s _ 2012_33				
Action/Comments					
Tree or limb					

No Photos

LM Start	8.58	Rating **	M	Issue No.	92
LM End	8.58	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.146784 °	38.146784 °
				-121.682780 °	-121.682780 °
DWR ID	DWR_NA0002_02_s _ 2014_92				
Action/Comments					
Inspector Comments: FS_ID:12886					
EP_NO: 842					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine disposition of pipe.					
FIELD_STRUCT_DESC: 12-inch gas pipe through levee 3-feet below the crown Gasline marker/vent on WS shoulder. (Permit No. 842, 1940).					
FS Date: 5/3/2013					

Photo 1 of 1 : UCIP_791.jpg



Gasline marker and vent to right of JP.

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	8.68	Rating **	U	Issue No.	48
LM End	8.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.145368 °	38.142430 °
				-121.683072 °	-121.683978 °
DWR ID	DWR_NA0002_02_s _ 2013_48				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 2 : richard_s_20140318_556.jpg



Looking north at dense trees on landward slope and toe.

LM Start	8.68	Rating **	U	Issue No.	48 (cont)
LM End	8.89	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : richard_s_20140318_557.jpg



Looking south at trees on landward slope.

LM Start	8.93	Rating **	A/W	Issue No.	47
LM End	8.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.141928 °	38.141928 °
				-121.684308 °	-121.684308 °
DWR ID	DWR_NA0002_02_s _ 2013_47				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	8.94	Rating **	U	Issue No.	18
LM End	9.17	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.141399 °	38.138158 °
				-121.685346 °	-121.686531 °
DWR ID					
Action/Comments					
Inspector Comments: 2008 - Erosion causing vertical bank at the highway on top of levee. The whole bank along the highway should be repaired. 2009 - Minimal new erosion. 2011 - Bank continues to slowly erode. 2012 - Upgrade to critical, new erosion since lat year and steeper slopes in sections. 2013: No observed changes. [2013 Site ID: SAC_11-2_L]					

Photo 1 of 1 : USACE2013A_SAC_11-2_L_1.jpg



USACE 2013 Photo #1

LM Start	9.05	Rating **	M	Issue No.	93
LM End	9.05	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.140391 °	38.140391 °
				-121.685265 °	-121.685265 °
DWR ID	DWR_NA0002_02_s_2014_93				
Action/Comments					
Inspector Comments: FS_ID:12927					
EP_NO: 16014					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine disposition of pipe.					
FIELD_STRUCT_DESC: 1 of 2: 12-inch pipe through levee 2.0 feet					
below crown. Pump on waterward side. Concrete riser pipe on					
landward side (Permit No. 16014, 1995).					
FS Date: 5/3/2013					

No Photos

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	9.05	Rating **	M	Issue No.	94
LM End	9.05	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.140391 °	38.140391 °
				-121.685265 °	-121.685265 °
DWR ID	DWR_NA0002_02_s _ 2014_94				
Action/Comments					
Inspector Comments: FS_ID:12928					
EP_NO: 16014					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine disposition of utility.					
FIELD_STRUCT_DESC: 2 of 2: Electrical conduit through levee 2.0					
feet below crown. Pump on waterward side. Concrete riser pipe on					
landward side (Permit No. 16014, 1995).					
FS Date: 5/3/2013					

No Photos

LM Start	9.39	Rating **	M	Issue No.	95
LM End	9.39	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.135584 °	38.135584 °
				-121.686108 °	-121.686108 °
DWR ID	DWR_NA0002_02_s _ 2014_95				
Action/Comments					
Inspector Comments: FS_ID:12943					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Annular space between pipes should be grouted. IF abandoned, these pipes should be abandoned properly.					
FIELD_STRUCT_DESC: 18-inch corrugated metal conduit pipe through the levee 4.5 feet below the crown. Inactive 12-inch pipe sleeved through 18-inch. Both ends open. Siphon breaker and air valve in 24-inch CMP riser on LS shoulder. 9'X5' concrete box with slide gate off LS toe. Originally included in the 1959 O&M manual.					
FS Date: 5/3/2013					

Photo 1 of 1 : UCIP_792.jpg



Standpipe and concrete box at LS.

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	9.42	Rating **	A/W	Issue No.	15
LM End	9.42	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.135106 °	38.135106 °
				-121.686065 °	-121.686065 °
DWR ID	DWR_NA0002_02_s _ 2012_15				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	9.53	Rating **	M	Issue No.	96
LM End	9.53	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.133512 °	38.133512 °
				-121.685948 °	-121.685948 °
DWR ID	DWR_NA0002_02_s _ 2014_96				
Action/Comments					
Inspector Comments: FS_ID:16146					
EP_NO: N/A					
Repair Type:					
Crossing Status:					
UCIP Comments: Need to determine Permit No. for this crossing.					
FIELD_STRUCT_DESC: Gasline markers on LS toe and WS shoulder.					
FS Date: 5/3/2013					

Photo 1 of 1 : UCIP_1415.jpg



Gasline Marker on LS shoulder

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2014

Brannan Andrus Levee Maintenance District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Left	13.30	03/27/2014 03/27/2014	Richard Willoughby

LM Start	9.68	Rating **	U	Issue No.	16
LM End	9.74	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.132499 °	38.130537 °
				-121.686135 °	-121.686737 °
DWR ID	DWR_NA0002_02_s _ 2012_16				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 2 : richard_s_20140318_519.jpg



Looking west at dense vegetation on waterward shoulder and slope.

LM Start	9.68	Rating **	U	Issue No.	16 (cont)
LM End	9.74	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : richard_s_20140328_504.jpg



Looking south at dense vegetation on waterward shoulder and slope.

LM Start	9.85	Rating **	M	Issue No.	17
LM End	9.98	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.129722 °	38.127672 °
				-121.687468 °	-121.688646 °
DWR ID					
Action/Comments					
Inspector Comments: 2004 - Wave wash pockets approximately 100 ft					

Photo 1 of 1 : USACE2013A_SAC_10-8_L_2.jpg



USACE 2013 Photo #1

* Location
LS : Land Side
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement